

Karpov offers deal 'not tied to Star Wars'

By Philip Webster, Chief Political Correspondent
The Soviet Union last night held out the prospect of a deal to cut nuclear arms in Europe, including United States cruise missiles based in Britain.



The Queen and Duke of Edinburgh at the Great Wall yesterday.

Bank base rates go up 1% to 11%

By Rodney Lord, Economics Editor
The cost of borrowing rose by 1 per cent yesterday as the Government endorsed a rise in interest rates. The big five clearing banks, which now include the TSB, all put up their base rates from 10 per cent to 11 per cent.

Great Wall stormed by Queen

From Alan Hamilton Peking
The man and the woman who can jointly claim to hold the title of world's oldest person met yesterday and discussed whether you could see England from the top of the Great Wall.

Heathrow under siege by Asians

By Howard Foster
Heathrow had its busiest day in the airport's history yesterday with up to eight times the normal number of Asians seeking entry to the United Kingdom at the mid-night deadline for visas approached.

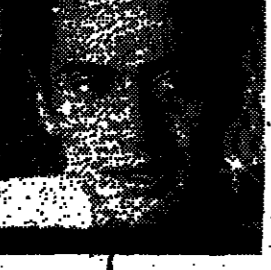
Hurd puts plea on judges to Cabinet

By Philip Webster, Chief Political Correspondent
Mr Douglas Hurd, the Home Secretary, is to seek Cabinet support in an attempt to override the opposition of the Lord Chancellor and much of the legal profession to moves designed to encourage tougher sentencing for violent crimes.

Shultz to meet Shevardnadze

From Michael Biason, Washington
Mr George Shultz, the American Secretary of State, said yesterday the United States should make as much as possible out of the achievements at Reykjavik, and announced he would be meeting Mr Eduard Shevardnadze, the Soviet Foreign Minister, in Vienna next month.

Tomorrow



Life on Death Row
Carlos De Luna, aged 24, has been on Death Row in a Texas jail for more than three years. He was due to be executed this morning but in his final hours came a stay of execution - so the waiting and the uncertainty resumes.

Portfolio Gold

There was no winner yesterday in The Times Portfolio Gold £4,000 daily competition so there is £8,000 to be won today.

TIMES BUSINESS Shops clamp

The Government is clamping down on developers' proposals to build large new shopping and leisure centres in the green belt. Page 25

TIMES SPORT British defeat

White Crusader, the British yacht, was beaten by New Zealand IV in the America's Cup challenge trials off Fremantle, Australia. Page 46

TIMES FOCUS

London University, the largest in the country, is celebrating its 150th anniversary at a time of change and challenge. Special Report, pages 32-37

Baker unveils 'buy a school' pilot scheme

A "right to buy your school" pledge could be included in the next Tory manifesto in the wake of the plan for 20 city technology colleges outlined yesterday by Mr Kenneth Baker, the Secretary of State.

Martens offers resignation in language row

From Richard Owen Brussels
Mr Wilfried Martens, Belgium's longest serving post-war prime minister, yesterday offered his resignation to King Baudouin after a split in the ruling Centre-Right coalition over Belgium's language problem proved unbridgeable.

Kinnock tries to restrict TV defence questions

By Richard Evans
Mr Neil Kinnock was at the centre of a "censorship" row last night after attempting to dictate the terms of an interview on Labour's controversial non-nuclear defence policy to a television current affairs programme.

Table of contents listing page numbers for various sections: Home News 2-5, Overseas 7-10, Sports 11-13, Arts 14, Births/deaths 15, Marriages 16, Business 17-24, Court 25-31, Crosswords 14-24, Diary 24, Events 24, Features 14-16, Law Report 17, Overseas 7-10, Leaders 17, Letters 17, Obituary 22, Parliament 22, Police 22, Sales Room 22, Science 22, Sport 22-46-48, Times 47, TV & Radio 24, Weather 24

Advertisement for Ford cars. It features images of Ford cars with prices: £19.95 and £12.95. The text includes 'Ford 'shows faith' in £1.46bn stake' and 'By Craig Seton'.

Vertical text on the far left edge of the page, partially cut off. It includes phrases like "All quiet in the eye of storm", "up le", "MORT", "plan", and "edn".

NEWS SUMMARY

Ministry to fund Nimrod project

GEC Avionics is to continue its programme on the Nimrod Airborne Early Warning aircraft to the end of the year in a joint project with the Ministry of Defence...

Riot film 'test' ruling

Harlech Television was yesterday ordered by a High Court judge in chambers to hand over to police unpublished film of the recent St Paul's riots.

BNFL Soccer on the dole

British Nuclear Fuels paid £6,000 yesterday to a former worker who was dismissed for allegedly leaking information about the Sellafield reprocessing plant in west Cumbria.

Unions to seek writ

Unions representing 20,000 employees of the Royal Dockyards look certain this morning to seek a writ against the Government.

SDP gets a boost

The Social Democrats' front bench in the House of Lords was boosted yesterday by the presence of the Duke of Devonshire, one of Britain's premier dukes and a former Foreign Minister in the Macmillan Government.

Cocaine charges

Six people were remanded in custody until October 23 by magistrates at Uxbridge, west London, yesterday, charged with being concerned together on Sunday at Heathrow Airport in evading the prohibition on the importation of a quantity of cocaine.

Labour strategy seeks floating voters

By Nicholas Wood Political Reporter Labour strategists aim to make the Government's record on public services and the use it has made of North Sea oil revenues their number one target in the run-up to the general election...

ground of politics with its new soft-sell techniques. "It enables us to put across the message in a much more coherent way and in line with our longer-term subsequent elaboration of our policies. There is a logic in 'investing in people' that will serve us well over the next few months..."

Storm of criticism for new colleges

By Mark Dowd, Education Reporter A prospectus disclosing the fine print behind the Government's new technology schools was unveiled yesterday by Mr Kenneth Baker, Secretary of State for Education, provoking a storm of criticism from the scheme's opponents.



Levan Merritt, aged five, with his toy gorilla Jumbo yesterday. The real Jumbo, at Jersey Zoo, stood guard over the boy, of Horsham, West Sussex, as he lay unconscious after falling into the gorillas' pit in August. Levan, who fractured his skull and broke his left arm in two places, was yesterday presented with three toy gorillas when he met the zoo owners, Lee and Gerald Durrell, in a television studio where they were appearing in a programme about conservation (Photograph: Dod Miller).

IRA backs moves to end MPs' ban

By Richard Ford The Provisional IRA is backing moves by leading figures in its political wing in the north to allow elected representatives to take their seats in the Dail, the Irish Republic's Parliament.

Biffen warning on 'Tory Maoists'

By Robin Oakley Political Editor Mr John Biffen, leader of the Commons, yesterday warned the Conservative Party not to overdo the ideology if it wanted to preserve the achievements of the Thatcher Government's "conviction politics".

Legal aid proposals 'naive'

By Frances Gibb Proposals to overhaul the legal aid scheme and streamline lawyers' working practices are attacked by the Bar today as naive, ill-thought out and likely to mean a poorer service.

US to return Quinn

The United States Supreme Court cleared the way yesterday for the extradition to Britain of William Quinn, the alleged IRA bomber (Reuter reports).

Ships collide

Two freighter ships hit each other and eight small yachts on the fog-bound river Medway at Rochester, Kent, yesterday. No-one was hurt.

The Royal Bank of Scotland plc Base Rate The Royal Bank of Scotland announces that with effect from close of business on 15 October 1986 its Base Rate for advances will be increased from 10% to 11% per annum.

Now we are sixty - Hipy Bthuthdy!

Three cheers for Pooh! (For Who?) For Pooh. Why, what did he do? I thought you knew. The fat bear of very little brain and twee manners, who still haunts the nurseries of well brought up middle-class children, is celebrating his sixtieth birthday.

TSB BANK With effect from the close of business on Tuesday, 14th October 1986 and until further notice, TSB Base Rate is increased from 10.00% p.a. to 11.00% p.a.

Illegitim could thousand... Society model family... number in R... miss today... Dep

Illegitimate 'stigma' could be ended for thousands of children

By Frances Gibb, Legal Affairs Correspondent

The Government is expected to bring in laws to grant equal rights to the 126,000 children born illegitimate each year in England and Wales.

to adopt a draft Bill to ensure all children are treated alike by law, even though there will still be some distinctions between parents who are married and unmarried.



The Duchess of York, who is learning to fly, alighting from a single-engine Piper Warrior aircraft yesterday after an hour-long training session at RAF Benson, in Oxfordshire.

Law Society outlines 'model' family court

The campaign for a family court gained momentum yesterday with proposals from the Law Society outlining its own model for a unified court system embracing all family proceedings.

But there would not need to be a network of new court buildings, the society says. The family court would use existing county and magistrates' court buildings, except where too closely situated to criminal courts.

Austere face of mortgage possession

By Michael Dynes

"Is there anyone here for the possession court that hasn't yet given me their name?" the usher cried as Oxford County Court prepared for its routine monthly hearings for repossession orders.

Building societies were last night waiting to see how the markets settled before deciding whether to increase the mortgage rate.



Building societies were last night waiting to see how the markets settled before deciding whether to increase the mortgage rate.

Bamber in witness box today

By Michael Horsnell

Mr Jeremy Bamber, the farmer's son accused of shooting dead five members of his family at their remote farmhouse in Essex last year, is expected to begin giving evidence at his trial today.

Random test call on drink-driving

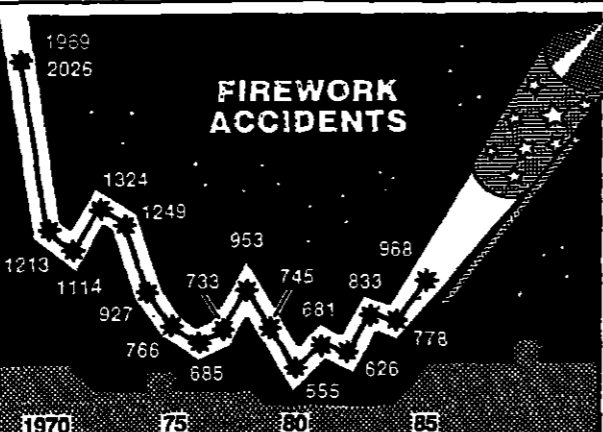
By John Goodbody

The police should do breath tests on customers outside public houses on Saturday evenings as part of new legislation against alcoholism.

alcohol, giving the advice that a safe level of drinking for men in a week is the equivalent of ten and a half pints of beer or 21 single measures of spirit.

Police to stage last moments of girl victims

Detestives hunting the man who sexually assaulted and strangled two Brighton schoolgirls are to stage a reconstruction tomorrow of their last known movements.



Firework crackdown

The Government announced new measures yesterday to curb firework accidents, which injured 968 people last year.

BBC plans more news in morning

By Gavin Bell, Arts Correspondent

The BBC will launch its daytime television service with a new look *Breakfast Time* programme later this month, with the accent on news rather than informal chats with celebrities.

TODAY, ONE IN THREE CLEANING CONTRACTS ENDS IN DIVORCE.



Cleaning contractors can break your heart. First of all they sweep you off your feet. Then, when the honeymoon period is over, so too it seems, is the commitment.

Office Cleaning Services Limited

OCS Changing Venues - Unchanging Values. HEAD OFFICE: 28-36 EAGLE STREET, LONDON, WC1R 4AN TELEPHONE 01-242 8800

Urgent call for hepatitis vaccine

By Pearce Wright, Science Editor

An epidemic of the hepatitis B virus, which attacks the liver and is a cause of liver cancer, shows signs of easing.

Nevertheless, a call was made yesterday by experts meeting at the Royal Society of Medicine, in London, for a new vaccine to be made more readily available in Britain to doctors, dentists, auxiliary medical staff and social workers at risk of contracting the disease from carriers.

The Department of Health was urged to extend the number of groups recognized for automatic vaccination.

Advisors to the Government identified certain policemen and all ambulancemen and prison workers, as well as prostitutes, drug addicts and homosexuals as those most at risk.

The additional groups proposed by yesterday's meeting would add about 500,000 people to those recognized for vaccination.

The Government is concerned at the cost to the National Health Service. Each treatment costs about £34.

Dr Elizabeth Fagan, of the liver unit at King's College Hospital, London, said the modern vaccines were unique in both their methods of manufacture - by genetic manipulation - and as the first effective preventive agent against liver cancer, one of the world's most common cancers.

She said that the added "scourge" of another liver virus, which has shown signs of spreading in recent months, called hepatitis delta virus - a highly dangerous agent, which depended on the B strain to help it flourish - could be prevented by vaccinating high risk groups.

Dr Fagan said that 75,000 individuals had been vaccinated in the United Kingdom since 1982, compared with more than a million in the United States.

She said that within one year of its use, the vaccine reduced by more than 80 per cent the chance of a carrier passing on the virus to a member of the high-risk group.

The automatic provision of vaccination to dentists and their staff was proposed by Dr Laksman Samaranyake, of the Department of Oral Medicine and Pathology at Glasgow Dental Hospital and School.

Hurd faces legal fight over police use of plastic bullets and gas

By Peter Evans, Home Affairs Correspondent

Mr Douglas Hurd, the Home Secretary, has a legal fight on his hands over plans to out-maneuvre opposition by some police authorities to the use of plastic baton rounds and CS gas. The issue will decide the limit to a Home Secretary's power.

The dispute centres on his decision to provide the gas and rounds from central supplies, if the Inspectorate of Constabulary said there was a need and the equipment had not been bought.

The number of police authorities reluctant to make CS gas and baton rounds available is said to be small. A report to be discussed by the police committee of the Association of County Councils next week says that Northumbria is seeking leave to apply for judicial review.

Counsel has advised there is a strong argument that the circular containing the Home Secretary's decision exceeds legal authority in requiring the police authority to obtain the equipment from a Home Office store and in authorizing the provision of such equipment to chief constables without the approval of the authority.

The Home Office has replied saying it does not con-

sider the Home Secretary requires statutory authority to issue the circular or take the proposed measures.

The ACC report says: "They take the view that his position as Secretary of State is sufficient authority. They also take the view that, if they are wrong in that contention, Section 41 of the Police Act 1964, contrary to counsel's opinion, would itself afford the Home Secretary the necessary authority."

Section 41 says: "The Secretary of State may provide and maintain, or may contribute towards the provision or maintenance of, a police college, district police training centres, forensic science laboratories, wireless depots and such other organizations and services as he considers necessary or expedient for promoting the efficiency of the police."

Image blamed for lack of recruits

The image of the police held by the minority communities is largely to blame for too few recruits from them, Mr Douglas Hogg, Parliamentary Under-Secretary at the Home Office said yesterday.

In an unusually frank

speech to the first national conference of police recruiting officers, Mr Hogg, a former special constable, said: "There is, for example, a widely held belief that the police tend to pick unfairly on young people, particularly young black people. There is a belief that there is racial discrimination within the police service and that promotion prospects for black and Asian officers are poor."

Mr Hogg said those were among powerful deterrents to joining the police service. "We need to consider how they may best be overcome."

"Racial discrimination and harassment, whether real or imagined, were clearly factors of great significance. I utterly condemn such behaviour, whether committed by or within the police service, and I know that you all share my views."

Mr Hogg, who announced the appointment of an additional staff officer to HM Chief Inspector of Constabulary, said that the ethnic minority communities were under-represented in the police service. The latest figures showed that fewer than seven police officers out of every 1,000 came from a black or Asian background.

Constable painting likely to fetch £1m

By Geraldine Norman, Sale Room Correspondent

The most important Constable painting to come on the market for 30 years was unveiled at Christie's yesterday. The work, "Flatford Lock and Mill" is expected to fetch more than £1 million when it comes under the hammer on November 21.

The painting was exhibited at the Royal Academy in 1812, and depicts the mill that belonged to John Constable's father, with the banks of the river Stour where he played as a boy and which he sketched often in later life.

It is one of the artist's first important pictures and shows him feeling his way towards the impressionistic naturalism which was to prove so fundamental an influence on nineteenth century landscape painting.

In a letter to his fiancée he records having met Benjamin West, the president of the Royal Academy, after his painting was accepted for exhibition.

Constable writes: "I wished to know if he considered that mode of study as laying the foundation of real excellence", and records West's reply: "Sir (said he) I consider that you have attained it."

Ms Bicknell must have glowed with pride as she read



Mr Simon Dickinson, of Christie's, with the "lost" painting (Photograph Chris Harris).

The painting has been sent for sale by an unnamed American collector, believed to be a descendant of Senator WA Clark who is known to have owned the picture in 1926.

In that year he sent it for sale at the American Arts Association where its importance was not realized and

it failed to find a buyer. The picture was returned to the family but scholars lost sight of it.

In the early 1980s the present owner took the picture to the Corcoran Gallery in Washington to ask its opinion. The gallery contacted Charles Rhyne, America's foremost

Constable scholar, who recognized the painting as the missing masterpiece. Since then it has been on loan to the Corcoran and was included in the exhibition of "Constable's England" at the Metropolitan Museum in New York in 1983.

Sale room, page 22

'Contract out' option over NHS waiting

By Jill Sherman

Health authorities may have to contract out their waiting lists to the private sector if that proves the cheapest option, Mr Tony Newton, the Minister for Health, said yesterday.

Speaking at a conference held by the Independent Hospitals Group, Mr Newton said that ministers would be considering regional health authority action plans to reduce waiting lists, due in at the end of this month, before issuing further guidance.

In some cases, shorter lists could be achieved by better management and better ways of administering resources, Mr Newton said, citing as an example the appointment of an orthopaedic bed manager in Bath Health Authority.

"It may emerge that there is much that health authorities can do by making more use of resources available in the private sector. If it is cost effective, we hope that more authorities will look at this possibility," Mr Newton said.

"Health authorities have got to make judgements on whether spending resources in the NHS will have a more useful effect than spending the same money on contracting arrangements in the private sector."

He admitted that in some cases the Government would have to assess the need for more resources.

Mr Newton welcomed any co-operation between the NHS and the private sector and regarded it as complementary to the state service rather than in competition with it.

The growth of private acute hospital beds had reached a plateau, at best, and might be falling marginally, Professor Alan Maynard told the conference.

Professor Maynard, from the Centre of Health Economics at York University, warned the private sector that it would grow only if it controlled costs better than the NHS, if there were cuts in government spending on the NHS, or if there were mismanagement in the NHS.

The development of community care was an example. If badly managed, it could lead to cutbacks in the NHS acute sector, Professor Maynard said.

Blind helped by textured pavements

Knobby pavements are coming to the aid of the blind and disabled (Rodney Cowton writes).

After trials of more than 20 materials the Department of Transport yesterday authorized local authorities to begin using a specially textured paving to enable blind people to tell when they had reached a pedestrian crossing. The paving has bumps which can be felt through the sole of the shoe.

It is coloured red to assist partially sighted people and will probably be used in conjunction with ramped pavement edges so that disabled people, particularly those in wheelchairs can more easily get on and off the pavement.

PARLIAMENT OCTOBER 14 1986

Aids may double every 10 months

HEALTH

The number of Aids cases in Britain might be roughly doubling every 10 months, Lady Trumpington, Under Secretary of State for Health and Social Security, told the Lords.

She said that at the end of September there were 512 cases, of whom 250 died, and that the estimated number of those infected with the virus could be about 30,000.

Lady Trumpington told Lady Sharples (C) that visitors of those returning to the United Kingdom were not screened for Aids - acquired immune deficiency syndrome - and that the Government had taken no decision to introduce screening.

She said the Government regarded control of the spread of this terrible disease as of the highest priority. Urgent action had been and was being taken on a number of fronts. These included a public information campaign, additional resources for treatment, training for National Health Service staff, research, screening of blood donations, funding for voluntary organizations and advice to professionals.

"Ultimately it is the responsibility of each and every one of us to ensure that our behaviour does not put ourselves or others at risk."

Lady Sharples said that the French had invented a machine which took only 10 minutes to screen people. Saudi Arabia, the Arab Emirates and India already screened visitors.

Lady Trumpington did not have any information about France or Saudi Arabia at her fingertips. She told Lord Cledwyn of Penrhos, Leader of the Opposition peers, and Lord Avebury (L) that the incidence of Aids in prisons was no higher than outside. The greatest incidence of the disease was in the Greater London area.

Aids was not highly infectious and isolation units were not considered appropriate for Aids patients.

Lord Kilmarnock (SDP) said it had been calculated that in four years time 465 people a month, the equivalent of a full jumbo jet, would die from Aids.

"In view of that terrifying forecast, is Lady Trumpington satisfied that the Government's advertising is adequate? It has been widely criticized as much too feeble, possibly for fear of public disapproval, and has failed to give sufficient information to prevent the spread of the virus. Are sufficient funds devoted to this?"

Lady Trumpington said the effectiveness of the measures was kept under review. No options for the future had been ruled out.

"The Chief Medical Officer and health ministers are only too ready to go anywhere and speak on television or radio, or at public meetings, if invited."

Already £2.5 million had been made available for the Aids information campaign. £2.5 million for the three Thames regions, support for the voluntary sector, training and research. This was in addition to the resources already committed by health authorities. Funding requirements, too, were kept under review in the light of developments.

Lord Elwyn-Jones, for the Opposition, asked what contribution was being made to medical research into Aids.

He asked whether the great British medical and scientific expertise was being adequately called upon to meet the serious challenge to the world's health.

Lady Trumpington said the Government-funded Medical Research Council was responsible for coordinating research on Aids in the United Kingdom. Twelve special project grants had been awarded at a total cost of about £1 million. This included a contribution from the Health Department of up to £300,000 a year for epidemiological research and for the UK centre for co-ordinating epidemiological research.

Lady Lane Fox (C) said there was concern about the lack of a screening method for visitors and immigrants, especially as it was believed that this would emphasize the heterosexual aspect in transmitting this foul disease.

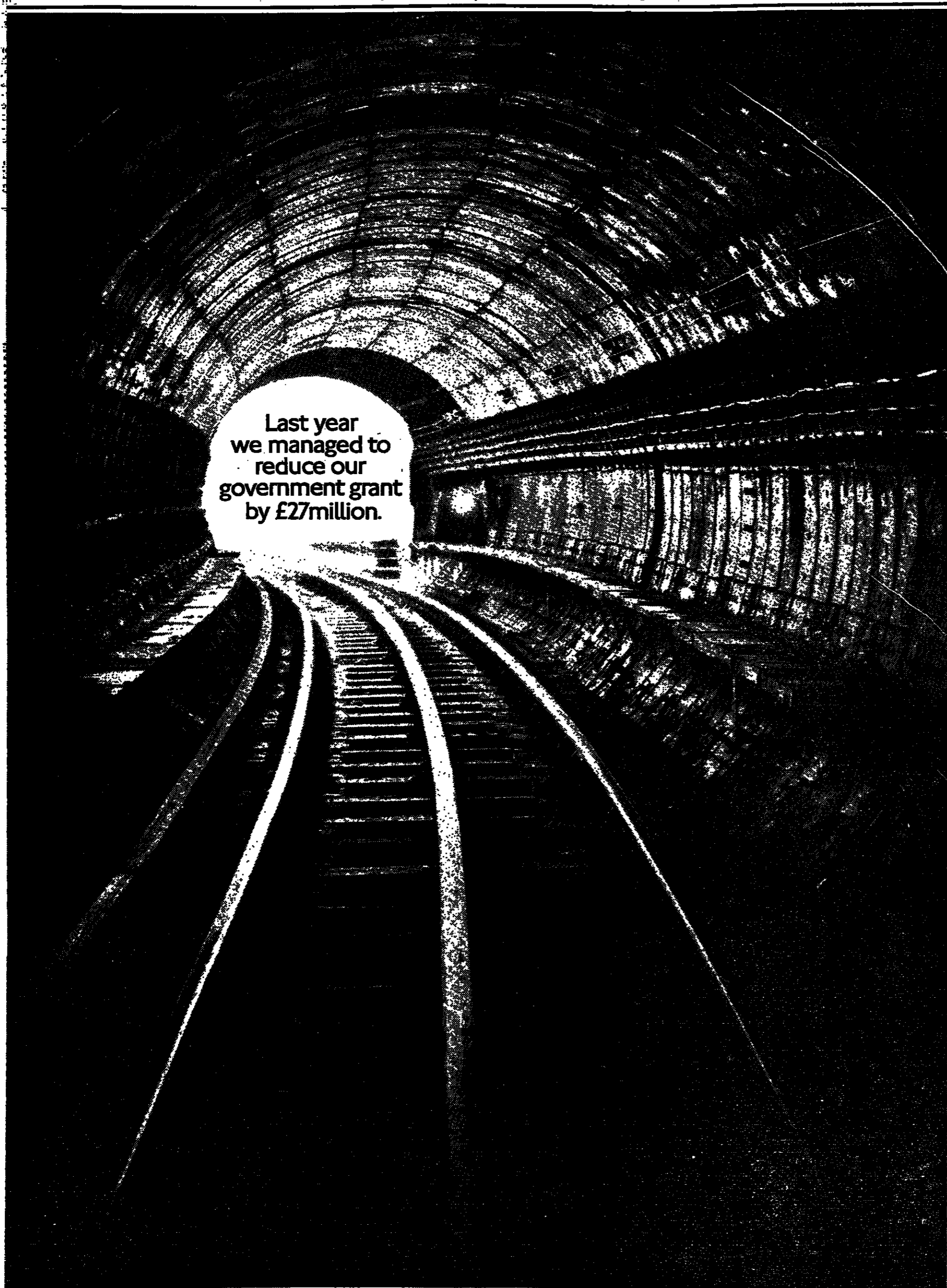
Lady Trumpington said screening visitors on a comprehensive or selective basis would involve formidable practical problems, and its effectiveness as a method of combating the spread of Aids here had been questioned by medical experts.

Lord Chalfont (Ind) asked whether, if figures showed a close relationship between Aids and promiscuous homosexual activity, the Government was inhibited from making that clear in information given to people to enable them to avoid this dreadful disease.

Lady Trumpington said the Government was not so inhibited. Indeed, this was one of the valuable ways in which voluntary organizations, which included the gay community, could help with spreading information. Education was the most important thing.

Parliament today

House of Lords (2.30): Government statement on Reyjavik summit, National Health Service (Amendment) Bill, committee stage.



Last year we managed to reduce our government grant by £27million.

During our best financial year to date we've opened the new tube line to Terminal 4. We've modernized 16 underground stations and installed five new escalator systems.



We've also introduced a new bus service, built a bus garage and bought 260 new buses. Yet we have still managed to reduce our government grant by a staggering £27 million.

trial co after w super fails to

Airlines in ner a £3m

Reform is t

Trial collapses after woman supergrass fails to testify

By Richard Ford

The use of "supergrass" evidence to obtain convictions for terrorist offences in Northern Ireland has received a further setback with the failure of a woman informer to testify against alleged accomplices.

Two people charged on the word of the province's first female supergrass have been freed after the Director of Public Prosecutions in Northern Ireland told magistrates that he was not proceeding with the case.

Solicitors for another 17 people implicated in terrorist crimes by Angela Whoriskey are confident that charges against their clients will be dropped on Friday.

Yesterday Mr William McGuinness, aged 30, the younger brother of Martin McGuinness, a leading figure in the Provisional Sinn Féin, walked free from Belfast Magistrates' Court after charges of Provisional IRA membership and conspiring with Whoriskey to murder police officers were withdrawn.

The action by Whoriskey, who is serving a life sentence after pleading guilty to murdering a Royal Ulster Constabulary inspector four years ago, comes after a sustained campaign against the use of supergrasses and the retraction of statements by at least 17 informers during the past five years.

Whoriskey, aged 25, implicated 20 people a year ago

of involvement in alleged terrorist crimes, and forced others from her home city of Londonderry to flee across the border.

Her son, aged two, father and brother disappeared from their home and she has been in solitary confinement at Maghaberry jail, Co Antrim, since turning informer.

At her trial earlier this year, during which she admitted 39 terrorist charges, her counsel said that she had become "sickened" by the Provisional IRA and was determined to give evidence against alleged associates.

The Director of Public Prosecutions' office in Belfast yesterday refused to comment on whether she had decided to retract her statement or was refusing to testify in court.

The emergence in 1981 of supergrasses spread fear and uncertainty within the ranks of terrorist organizations giving police a big psychological advantage, but as the numbers charged on the word of supergrasses grew so did criticism.

Some nationalists believed that the lengthy periods people were in custody was effectively "internment by remand".

Trials were marked by attempts to intimidate the informers as they gave evidence, but several important cases collapsed when judges dismissed their evidence as unreliable or delivered not guilty verdicts.

Airlines in dispute over a £3m advert

By Harvey Elliott, Air Correspondent

A bitter dispute has broken out over a £3 million advertising campaign currently being shown on television at peak time by the airline British Caledonian.

It shows flying cabin staff holding a passenger by the hand and then letting him slip through their fingers, into the arms of a British Caledonian girl waiting to catch him on the ground.

The advertisement has angered Saatchi and Saatchi, the advertising agency which handles a British Airways' campaign which also shows uniformed cabin staff flying around the sky to rescue hapless travellers.

The agency has lodged a complaint with the Independent Television Companies Association (ITCA).

"We developed this idea and now they are trying to use it to their own advantage," Mr Bill Muirhead, Saatchi's deputy chairman, said.

"We shall be monitoring the response of the ITCA very carefully and if necessary will take further action to get the advertisement taken off the screens. It is a blatant attempt to depict British Airways."

He is also unhappy that the advertisement could play on the fears of passengers about falling from the sky and plans further legal action if nothing is done to remove it.

But British Caledonian is equally determined that it should not be dropped.

"It is preposterous and ludicrous to say viewers could mistake the advertisement for a British Airways advertisement," Mr David Radford, BCal's UK marketing manager, said.

"We checked with the ITCA twice before launching the commercial and intend to keep it going for another six months. There is nothing malicious or macabre in it in any way, it is simply based on a sense of humour."

The advertisement is designed to extol the virtues of BCal's door-to-door service and was filmed in Mexico and Horsham in Surrey.

An ITCA official said: "Frankly we don't intend to do anything about it. We have received a complaint and we could, if we wished, exclude it from the screens if we felt it was objectionable. But we can't agree with Saatchi and Saatchi that it warrants any further investigation."

The dispute could now switch either to the Independent Broadcasting Authority or even the High Court.

Saatchi and Saatchi said: "We are taking the problem very seriously. We don't like being ripped off."

BA receives boost for privatization

The booming Brazilian economy has enabled British Airways to turn loss-making routes to South America into important profit centres.

In the 18 months since it took over the routes from British Caledonian, the airline has seen both passengers and freight grow rapidly.

The Association of European Airlines said yesterday that all carriers flying to the South Atlantic were now benefiting from the extra traffic which has risen by more than 33 per cent in the past year.

"The booming Brazilian economy, tariff policies leading to lower fares and the resumption in growth of tourism are contributory factors," the association said.

The average load factor - the percentage of seats filled on every aircraft - has risen from 62 per cent in 1983 to 79.6 per cent in August this year.



Campfire cuisine being demonstrated by three members of the Kestrel patrol of the 54th (South) Belfast Scout troop in the gardens of St Paul's Cathedral, central London, yesterday. They were among 150 Scouts and Guides taking part in the final of the 1986 British Meat Camp Cooking Competition (Photograph: Nick Rogers)

Army catering

By Peter Davenport, Defence Correspondent

Computers enlisted to cut paperwork

The British Army's 5,000 cooks are to get high-technology assistance from next year in their efforts to satisfy the appetites of the 72,000 soldiers they feed around the world each day.

A new computer system that will mean an end to the time-consuming mounds of paperwork now faced by chefs will be introduced in units from Belize to Belfast, Cyprus to West Germany and the Falklands to Hong Kong.

Its aim is to simplify the task of producing more than 200,000 hot meals a day and allow cooks more time at the stove instead of behind a desk.

The system has been developed by Major Peter Jones, of the Army Catering Corps, who is based at Aldershot. He thought of the idea while reading for a BSc.

The first computers will be installed early next year and will be followed by training courses on how to use the new technology. It is expected that the system, called CATPAC - catering, planning, accounting and control - will save millions of pounds and many man-hours.

Major Jones received an award of £200 under the Ministry of Defence's ideas award scheme for developing

the system, which will give cooks instant access, wherever they are in the world, to recipes, food stocks, suppliers and costs.

The Army spends around £30 million a year on provisions for hot meals and its cooks can be called on to prepare anything from grand regimental dinners to meals on the battlefield.

Brigadier Michael Paterson, director of the Army Catering Corps (motto "We Sustain"), said that the intention was to take the drudgery out of accounting and to make management more sophisticated.

The system will involve more than 300 computers and related equipment and will be installed world-wide. The full cost is not known yet.

Details were disclosed in the latest issue of *Soldier* magazine, on a page next to a strip-cartoon lampooning the gastronomic qualities of canteen food.

The Ministry of Defence said it was hoped the system would get rid of the huge amounts of paperwork that presently faced chefs, and give them more time for cooking.

But would it make the end product any better? The ministry declined to comment.

Aid relief criticized by Runcie

By a Staff Reporter

Governments failed to match the energy and efforts of voluntary organizations in mounting relief operations to deal with the great problems created by natural disasters, the Archbishop of Canterbury, Dr Robert Runcie, said yesterday.

The archbishop said that aid was only slowly arriving in El Salvador, where at least 890 people died after an earthquake last Friday.

"I do not feel that governments have yet got the message," he said, opening a conference on the logistics of disaster relief of which the English Speaking Union, in London, was host.

Governments did some good work, Dr Runcie emphasized, and he praised Britain's recent RAF airlift to Ethiopia.

"But more is required of governments," he said. In the Sudan, volunteers had to provide their own trucks, petrol, spare parts, maintenance men and communications.

He added: "Overall, relief still arrives too slowly and in insufficient quantity. Co-ordination is not yet right."

"The same weaknesses have been shown up, as on a transparency, in the same places again and again, in one disaster after another."

"It surely cannot be right that the world's transport arrangements should depend to a large extent on the prodigious efforts of a Bob Geldof."



"We found it in Hertfordshire, Madam"

Reform is the toughest step

Planning controls: 3

There were about 3,000 planning inquiries last year, and all but about 150 of them lasted only a few days. It is the few long ones that cause most of the argument, and whoever is in power after the next general election is bound to do something to streamline them.

It will be hard to do that and convince all those involved that their interests and rights have been looked after.

The system becomes strained when it has to deal with large projects which have repercussions beyond their immediate area.

The Sizewell B power station is a good example. The issues discussed at the inquiry there concerned more than just local questions about the impact of the new installation on the coastline and community. It proved impossible to hold an inquiry about a nuclear power station without some debate about the advantages and drawbacks of nuclear and other forms of fuel.

The result at Sizewell was that the inquiry became almost the longest ever held, comfortably beating such marathon efforts as the Devour coalfield and the third

London airport, each of which took almost five years from the date of the planning application to the decision by ministers.

The Government predicted early this year that it would issue a decision about Sizewell next month, almost six years after the original planning application was issued.

Such mammoth inquiries turn into inquiries about government policy on issues like nuclear power and the future of air transport. If there was an inquiry tomorrow into a fourth London airport or yet another nuclear power station, the policy inquiry would have to be held afresh. There is growing pressure for such considerations of national policy to be extracted from planning inquiries and considered separately.

The eminent team that recently finished investigating the planning system for the Nuffield Foundation called on the Government to set national policy guidelines for the

United Kingdom and not just for Scotland, as is done now.

The risk in shortening the process is that the rights of objectors will be diluted. Fears of that have been heightened by the Government's refusal to hold a public inquiry into the Channel tunnel on the ground that it would take so long that it would never be built. Successive White Papers have given evidence of impatience among ministers about the planning system as a potential instrument for delaying job-creating developments.

There is one way in which a Government might help to compensate for public suspicion about any telescoping of the inquiry system: that it contributes to the costs objectors face when putting their case. Such assistance would be particularly deserved if evidence given is subsequently used by the Government to help frame policy.

Concluded

500 firms invited to sponsor the arts

By Gavin Bell, Arts Correspondent

Mr Richard Luce, Minister for the Arts, has launched a drive to stimulate business sponsorship of the arts, and urged arts bodies to "get their act together" in acquiring new sources of private support.

Mr Luce said yesterday that he was writing to 500 leading companies to draw their attention to tax benefits in the last Budget, aimed at encouraging donations to arts and heritage organizations.

A corporate scheme introduced last July is to be followed next spring by a similar plan for individual employees, under which they can obtain tax relief for donations up to £100 a year.

The initiative was aimed at creating "a new climate for giving" and was part of the Government's policy of encouraging self-help in the arts world.

"The beauty of this scheme is that it is up to the arts world how much they can persuade the business world to give in donations or sponsorship. If the arts bodies get their act together, and approach businesses professionally, the chances are they may raise quite a lot of money. The ball, to quite a considerable extent, is in their court," Mr Luce said.

He said he was impressed by the "climate of giving" in the United States. "It is the kind of climate we would like to see here much more. I cannot say we would move totally in that direction, but I think we have got a lot to learn from the Americans."

The Arts Council has said that current Government spending plans are insufficient and are undermining the basis of funding partnerships with local authorities and private sponsors.

Jail term confirmed on PC who bit rival

Richard Johnson, the Welsh police constable who bit off part of an opponent's ear during a rugby match, must serve his six-month jail sentence, the Court of Appeal ruled in London yesterday.

The Lord Chief Justice, Lord Lane, sitting with Mr Justice Farquharson and Mr Justice Roch, rejected an application by Johnson, aged 31, of Maes-y-Coed, Mid-Glamorgan, for leave to appeal against the sentence.

Lord Lane said that the sentence on Johnson, passed at Cardiff Crown Court in September after the PC had been convicted of wounding with intent, was correct.

"Unlawful violence of this sort on the football field needs discouraging as much as unlawful violence on the terraces or, indeed, anywhere else," Lord Lane said.

Lord Lane deplored that a man of Johnson's potential should have behaved in such a way and commented that David Bishop, the Welsh rugby international whose one-month jail sentence for punching an opponent in the face was suspended last month by different appeal judges, could consider himself lucky.

Johnson was brought to trial after an incident in the closing stages of a match last November between Cardiff and Newport police. He denied biting Mr Keith Jones, aged 40.

The maximum sentence for common assault, of which Bishop had been convicted, was 12 months. Malicious wounding attracted a maximum five-year sentence. The offence of which Johnson was convicted, wounding with intent, carried a maximum life sentence, Lord Lane said.

The court was told that almost a thousand people had signed a petition protesting about the sentence.

A PAINTING STOLEN in London was recently recovered in Hertfordshire. It was invisibly marked on the back, so it was swiftly returned to its owner.

Would your property be returned to you? Today, your treasured possessions are more at risk than ever before.

Sun Alliance, as Britain's largest home insurer, is doing something positive to help you protect your home and its contents.

No matter when your home and contents insurance is due, get the Sun Alliance free brochure and home value guide now by sending the coupon today. No stamp is needed.

BAD NEWS FOR BURGLARS

A special Property Marker Pen is FREE with every Sun Alliance Home Insurance policy issued with this offer. Use it to mark your precious objects invisibly with your house number and postcode. Also, display the "Property Marked" stickers to keep intruders away. They warn burglars that your property is marked to help the Police return stolen property to the rightful owners.



To: Sun Alliance Insurance Group, DMD, FREEPOST, Horsham, West Sussex RH12 1ZA. Please send me full facts, without obligation, about Sun Alliance Home Insurance. No salesman will call.

Name _____

Address _____

Postcode _____

My present policy expires on _____ (date)

Name of Broker/Agent (if any) _____

SUN ALLIANCE
HOME INSURANCE
INCORPORATING PROPERTY ASSURANCE

Peace
Jewi
human

Wiesel suff

French
hrug off
hreat by
resident

Villagers are
authorized by
armed rustlers

British TELECOM LinkLine

WILL LINKLINE MAKE THE COUPON A THING OF THE PAST?

Honestly now. How many coupons have you ever cut out? In our experience most people would rather use the phone. The only thing that might stop you would be the price of the call. That's why we've introduced LinkLine 0800, a phone call which can be even cheaper than a coupon. LinkLine 0800 lets your customers phone free, even if the call's from

Midlothian to Land's End. Small wonder, then, that the Territorial Army have increased their responses by an incredible three times and even increased the quality of the replies since they started using LinkLine. Figures like this are the reason why so many companies are putting their faith and their money

into LinkLine, and why British Telecom are, too. Call us free on 0800 373 373 for details of our new introductory offer and a LinkLine information pack. It'll prove that the only sensible way to cut out a coupon is not to print it in the first place.

LinkLine British TELECOM
CALL US FREE ON 0800 373 373 FOR MORE INFORMATION.

Ter
of l

E

I
of E
can
that
grec
ma
tr
wen
but
pati
slow
thin
alw
agai
So
und
rap
C
hav
con
mu
virt
bod
the
me
just
can
ma
bec
wo

in
no
poi
UK
be
ob
sen
cus
c
by
of
sil
get
car
Th
-h
wh
fro

WOOD PICKS THE PIONEER SIX

▼
 You can only put all six of your favourite compact discs into one kind of CD player: a Pioneer Multiplex. A Multiplex is the first CD player in the world that can play six compact discs automatically and thus give you seven hours of continuous music. It will play any sequence of up to 32 tracks you care to pre-programme. You can even let one of these ingenious machines make its own selection from any six discs you choose to put in it. And these are the six discs Victoria Wood would choose.

ONE

▼
ERIC COATES : LONDON SUITE
 Groves/RLPO. Arabesque

TWO

▼
GEORGE GERSHWIN : CONCERTO IN F
 Thomas/L.A. Phil. CBS

THREE

▼
PROKOFIEV : SYMPHONY NO. 1
 Jarvi/S.N.O. Chandos

FOUR

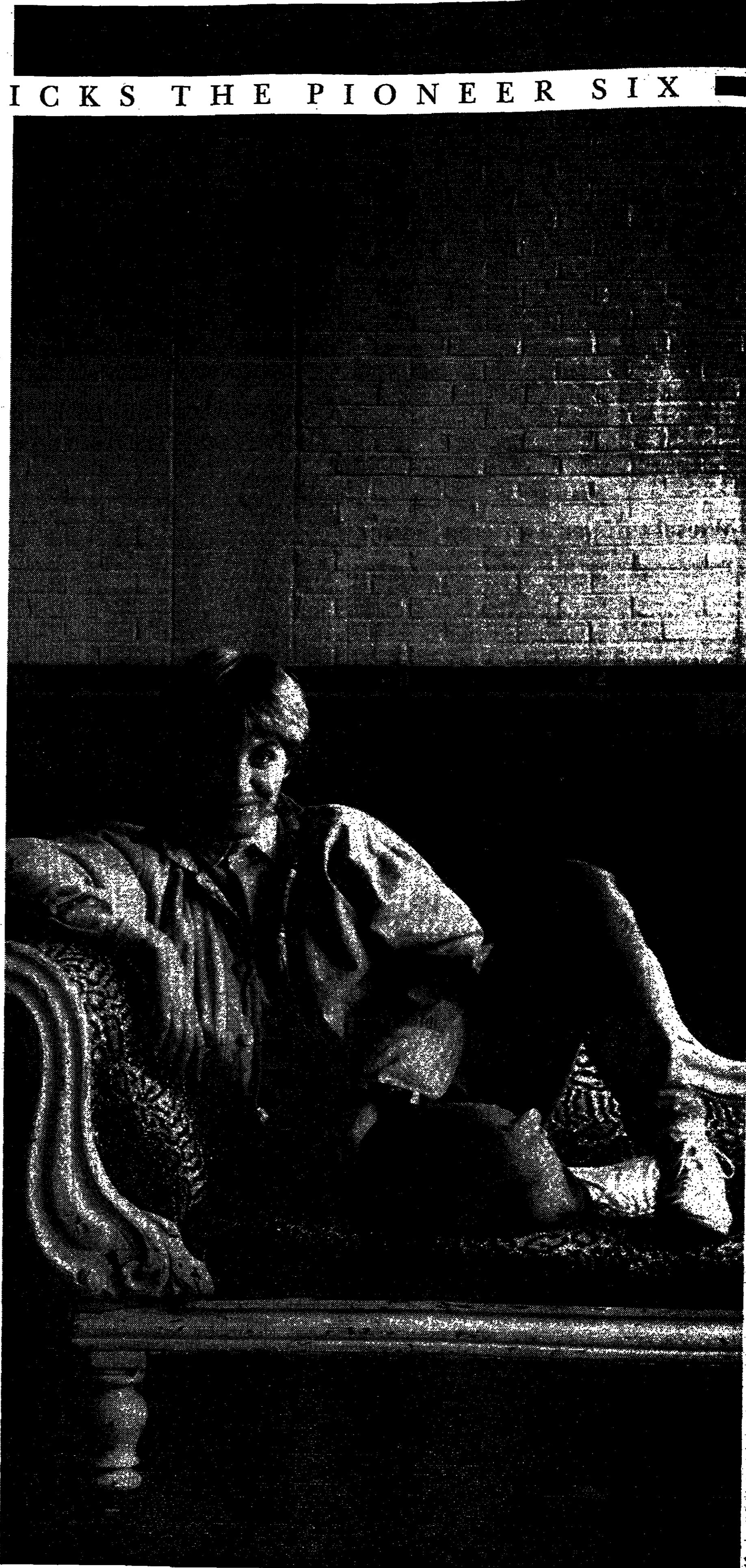
▼
BACH : CANTATAS 80 AND 140
 Munchinger/S.C.O. Decca

FIVE

▼
FAURÉ : REQUIEM
 Estes/Popp/Dresden. Philips

SIX

▼
POINTER SISTERS : BREAKOUT
 RCA



W A I T T I L Y O U H E A R P I O N E E R



FOR YOUR LOCAL STOCKIST CALL 01-200 0200

Te
of
E
I
of E
can
that
grea
It
wen
but
pati
slow
thin
alwa
agai
So
und
rapi
C
hav
con
mu
virt
bod
the
me
just
can
ma
bec
wo
A
in
nov
poi
UK
be
ob
sen
cus
S
by
of
stil
get
car
Th
-li
wh
fro

Cuts in priest shock P

Five Mozart owns fall

Blame murder may be linked Abu Nidal

Optimistic not

Cuts in prison terms of priest's killers will shock Polish Catholics

The Polish authorities, in a move that will profoundly shock the country's many devout Catholics, have cut the long jail sentences imposed on three secret police officers who murdered Father Jerzy Popieluszko, the Solidarity chaplain, two years ago.

The Government spokesman, Mr Jerzy Urban, said that the clemency, offered under an official amnesty, would not be extended to the principal killer, Captain Grzegorz Piotrowski, who will serve his full 25-year term.

But Piotrowski's immediate superior, Colonel Adam Pietruszka, formerly deputy head of the religious affairs department of the secret police, has had his sentence slashed from 25 years to 15.

Lieutenant Waldemar Chmielewski, who at his trial in January 1985 appeared on the verge of a nervous breakdown, has had his sentence trimmed from 15 to 10 years.

Lieutenant Leszek Pekala, who served as a getaway driver when the priest was first kidnapped then murdered, has had his term cut from 14 years to either 10 or nine years. Mr Urban did not specify the precise reduction in the cases of the two lieutenants.

From Roger Boyes, Warsaw

All four officers lost appeals to the Warsaw Supreme Court.

The clemency is within the powers of the amnesty announced on July 17 which excludes only spies, traitors and saboteurs, but the announcement so close to the second anniversary of the priest's murder will upset many who still travel to the grave of Father Popieluszko to pray for his canonisation.

The leadership of the Catholic Church, however, can do little to vent its displeasure because the authorities at the same time announced the freedom of the only imprisoned priest, Father Sylwester Zych.

Shortly after the imposition of martial law in Poland, a group of students, one of whom has also now been freed, tried to snatch the gun of a militia sergeant in a Warsaw tram. The gun went off and the sergeant was killed.

Father Zych later hid the gun in his parish safe and was jailed for eight years for aiding and abetting a murder. His case has often been raised with the authorities by the Church leadership, especially Archbishop Bronislaw Dabrowski, secretary to the Polish Episcopate.

Last week, at a meeting of the Warsaw region Communist Party, the Interior Ministry party representative said that "some circles" in Poland were unhappy with the amnesty for political prisoners.

The cutting of the prison sentences on Father Popieluszko's murderers is supposed to show that the amnesty does not benefit only Solidarity.

Mr Urban held out a sliver of hope for the involvement of Mr Lech Walesa, the Solidarity chairman, in the "national reconciliation" if he distanced himself from "political extremists" in the union, denounced the strike weapon to press for wage increases and withdrew his support for illegal organisations.

In such a situation, said Mr Urban in a tone that suggested that the event was unlikely, there might conceivably be a role for Mr Walesa.

The Government spokesman said that all the necessary licenses would be granted to a new independent magazine, *Res Publica*, when it was ready to start. The magazine, edited by Mr Marcin Krol, a lay Catholic intellectual, is aiming at giving a platform to moderate critics of the authorities.

Long-term problems emerge as rescuers struggle on

Mexico's experts to help quake city

From Paul Valley, Guatemala City

A team of disaster specialists which developed a programme to cope with the aftermath of last year's Mexican earthquake was due to arrive in San Salvador yesterday to begin a study of the long-term reconstruction of slum areas devastated by Friday's earthquake.

Not that the short-term problems in the Salvadorean capital are yet resolved. Reports reaching neighbouring Guatemala tell of scores and perhaps hundreds of individuals still buried alive in the rubble.

Aid and the international teams of rescuers were reportedly hampered by occasional tremors which threatened to bring down more wreckage.

"Of course we are doing what we can to help with the immediate problems, but we have to look at how the situation could develop over the next two to three months," Mr Agop Kayayan, Central American representative for the United Nations Children's Fund (Unicef), said.

Unicef yesterday stepped up its involvement in the relief effort by bringing in the Mexican team and by ferrying across the border from Guatemala large quantities of medicine, oxygen, blankets and water purification equipment.

The team, which worked for a week in Mexico, includes an architect with special expertise in the construction of priority urban services like water, sanitation and shelter, and a psychologist who will work particularly with children traumatised by their experiences in the earthquake.

"We need to begin work on



A boy injured in Friday's earthquake being comforted at a makeshift open-air hospital set up in the streets of San Salvador, where the majority of the hospitals are now in ruins.

the long-term problems right away," said Mr Kayayan. The Red Cross estimates that more than 20,000 people are living on the streets in San Salvador. "They have no shelter, no water supply and no sanitation," Mr Kayayan said. "It is only a matter of time

before an epidemic of diarrhoea breaks out, and diarrhoea is the biggest single cause of infant mortality in Central America today." Children evacuated from the city's six hospitals, all but one of which were destroyed or severely damaged in the earth-

quake, are particularly vulnerable. "Many of them are just lying in the street," he said. SAN SALVADOR: Rescuers here are losing hope of finding more survivors in the rubble (Reuter reports). Only two people were rescued alive yesterday.

Hand-over in Israel delayed by 'tactics'

From Ian Murray, Jerusalem

Last-minute tactical manoeuvring delayed yesterday's planned handover of the Israeli Prime Minister's post from Mr Shimon Peres of Labour to Mr Yitzhak Shamir of Likud.

It may now happen today, but could take longer and in the meantime Mr Peres remains caretaker of the Government of national unity.

Mr Barak, Secretary-General of the Labour Party, accused Likud of negotiating with ill will, and threatened to call a general assembly of the party "to decide the future of the Government" if the matter were not satisfactorily settled by tomorrow.

According to senior Likud sources, Labour is seeking to exploit the changeover to make sure important jobs are given to its political appointees and is most concerned at Mr Shamir's determination to return the sharp-tongued Mr Yitzhak Modai to the Cabinet. He was dismissed for insulting Mr Peres in July, and the outgoing Prime Minister has no wish to sit with him in the Cabinet until January at the earliest.

Labour also wants to block a Likud takeover of the vital immigration portfolios, which would mean bringing in Mr Moshe Arens to look after the Soviet Jewry question and Arab relations, and Mr Ronni Milo to deal with Jews in the rest of the world.

Mr Peres wants Mr Yossi Beilin, his Cabinet Secretary, to be given the plum job of Ambassador to Washington, while Mr Shamir is reluctant to see such a key post go to one of the Labour Party's young wolves.

Despite these hitches both sides seemed confident yesterday that the handover would go ahead soon.

Five Mozambique towns fall to rebels

From Michael Hornsby, Johannesburg

Five small rural towns in northern Mozambique have been captured by insurgents of the Mozambique National Resistance (MNR), according to South African press reports yesterday.

Tens of thousands of Mozambicans were said to be fleeing to neighbouring countries to escape starvation and intensified fighting between the MNR and Mozambique Government forces.

According to sources in Maputo, the towns of Zambo, Mutarara and Ulongue, in Tete Province; Caia in Sofala province; and Milange in Zambezia province, have been captured by the rebels. Mutarara, Ulongue, Caia and Milange are close to the Malawi border, the southern part of which forms a wedge of alien territory thrusting deep into Mozambique.

A statement issued after a meeting of Mozambique and five other frontline states - Angola, Botswana, Tanzania, Zambia and Zimbabwe - in Maputo on Sunday admitted that "sancti gangs" had occupied "frontline zones" in the provinces of Tete, Sofala and Zambezia.

The frontline states accused Malawi of aiding and abetting Pretoria's policy of "destabilisation" by allowing its territory to be used as a springboard for attacks on Mozambique.

Malawi and the MNR have denied that Malawi is being used to mount guerrilla incursions.

Maputo last weekend claimed South African forces were "concentrated along the borders with Mozambique and Zimbabwe and commando

units have been infiltrated to carry out acts of terrorism.

Maputo also alleged that a landmine explosion last week in the eastern Transvaal, close to the Mozambique border, which killed a member of the African National Congress guerrillas operating from Mozambique, had been staged by Pretoria to provide a pretext to attack its black neighbours.

After the landmine explosion, which wounded six white South African Defence Force soldiers, General Magnus Malan, the South African Defence Minister, warned of possible reprisals, and the next day Pretoria prohibited recruitment of Mozambique workers, whose earnings are an important source of income for Maputo.

This move was seen as possibly pre-empting a return by Pretoria to full-scale support for the MNR rebels, which has hitherto been restrained, at least formally, by the Nkomati non-aggression pact, which binds each side to refrain from aiding insurgents.

The Johannesburg *Star* newspaper quoted the Malawi ambassador in Maputo as saying 70,000 Mozambicans had fled from the fighting between the east of September and October 10.

During the past 18 months 60,000 Mozambique refugees are estimated to have settled in the South African tribal "homelands" of KaNgwane, Gazankulu and Lebowa.

LISBON: An MNR spokesman claimed yesterday that they had seized Mutarara, an important town on the Zambezi river and were attacking another nearby crossing-point (Reuter reports).

American 'admits' to spying

Tehran (Reuter) - Mr John Parris, an American engineer arrested in Iran four months ago, has admitted having spied for the Central Intelligence Agency (CIA), Tehran newspapers said yesterday.

The papers carried the transcript of an interview said to have been shown on Iranian television last night.

Mr Parris, aged 50, from Aiken, South Carolina, was quoted as saying that he had worked in Iran on various projects since 1969.

He is said to have supplied the CIA with information about telecommunication installations and projects, black market money rates, rumours about the health of Ayatollah Khomeini, the Iranian leader, rationing, real estate prices and power cuts.

At the time of his arrest he was working for Cosmos Engineers, based in Maryland, at Iran's main satellite ground station at Assadabad, southwest of Tehran.

Iraqi jets attacked Assadabad twice in June and July, killing two workers and disrupting telephone and telex links. Iranian officials have said that Mr Parris passed on information which helped the Iraqi stage the raids.

There have been no reports of a trial.

"I confess to my espionage activities," the newspapers quoted Mr Parris as having said. "Most probably I will spend a long time in prison."

KIRKUK: Iraq's oil exports are reported to be flowing normally, with no sign of damage to the main northern Kirkuk field, despite Iranian claims to have caused heavy destruction here.

Palme murder may be linked to Abu Nidal

From Christopher Mosey, Stockholm

A 40-year-old Swedish citizen deported from England on suspicion of belonging to an Abu Nidal hit squad was being questioned yesterday by police about the murder in February of the Swedish Prime Minister, Olof Palme.

The man came to Sweden from Jordan.

Most suspicion over the Palme murder involves Kurdish extremists, but a Swedish hunt spokesman in Stockholm said that Abu Nidal could not be excluded from suspicion.

Briton on death charge jailed for burglary

Dubai (Reuter) - Mark Spalding, aged 19, one of two Britons on trial here for the murder of a nightwatchman, has been jailed for eight years on unrelated charges including burglary, damaging property and escaping from custody.

Spalding, from Jarrow, Tyne and Wear, was sentenced yesterday after having been found guilty of entering nine rooms in two hotels in this Gulf emirate, stealing gold and silver ornaments and causing damage to doors amounting to 6,750 dirhams (£1,171). He was caught trying

to sell the stolen goods and later escaped from police custody. He was at large at the time of the murder, which he and Mr Michael Brown, aged 22, from Sutton Coldfield, West Midlands, have denied.

The dead man, Mr Konis Bramil Jonbat, aged 32, a watchman, was killed in June outside Chicago Beach Village, an exclusive housing compound.

Spalding and Mr Brown face the death penalty if convicted.

The prosecution alleges that they killed Jonbat by running him over with their car.

Optimistic note in Amnesty report

By Caroline Moorehead

A note of cautious optimism sets the tone for Amnesty International's 1986 annual report, published today.

It seems that governments are beginning to respond to pressure put on them by the growing number of human rights groups throughout the world - more than 1,000 independent organizations now have human rights as at least part of their programme - and international laws are gradually being strengthened.

The 1984 UN Convention Against Torture has now been signed by 41 governments and 81 have ratified the International Covenant on Civil and Political Rights.

Much, however, remains to be done. The world as described by Amnesty International in 1986 is still a place where torture is endemic, "disappearances" occur in depressing numbers, and summary executions continue.

Governments under attack have grown adept at claiming

PRISONERS OF CONSCIENCE

special circumstances to justify violations of human rights and they do so, the report notes, in the name of national sovereignty, security or development.

Some of Amnesty's appeals for co-operation have been met by organisations that the human rights organisation is merely a tool of hostile propaganda.

The death penalty remains a major cause for concern throughout much of the world, and there are areas where its use appears to be on the increase. During 1985 alone death sentences are known to have been carried out on 1,125 prisoners in 44 countries - but these are only official figures and the true number is certainly much higher.

Eighteen African countries carried out executions, of which 137 were hangings in South Africa. An increase in

the death penalty is also reported in the Caribbean and many Asian countries.

In the United States 1,642 prisoners were awaiting execution at the end of the year. Only in Europe does the movement towards abolition of the death penalty seem to be gaining momentum.

The use of torture continues, whether in order to extract information, or simply in a routine way. In Syria, for instance, torture is reported as systematic at all stages of detention, while in Kuwait the Deputy Prime Minister has announced that *falaqa* - beating on the soles of the feet - will continue as long as the security of the country requires it.

Early this year Amnesty International celebrated its 25th anniversary. With some 500,000 members throughout the world its membership has doubled in five years.

Amnesty International Report 1986 (5 Roberts Place, London EC1R 0EJ, £7.95).

'SHORTER' MEANS BIGGER

The original 'Oxford English Dictionary' runs to thirteen large volumes. If you feel diffident about giving it shelf space, then this Shorter, two-volume edition is made to measure for you.

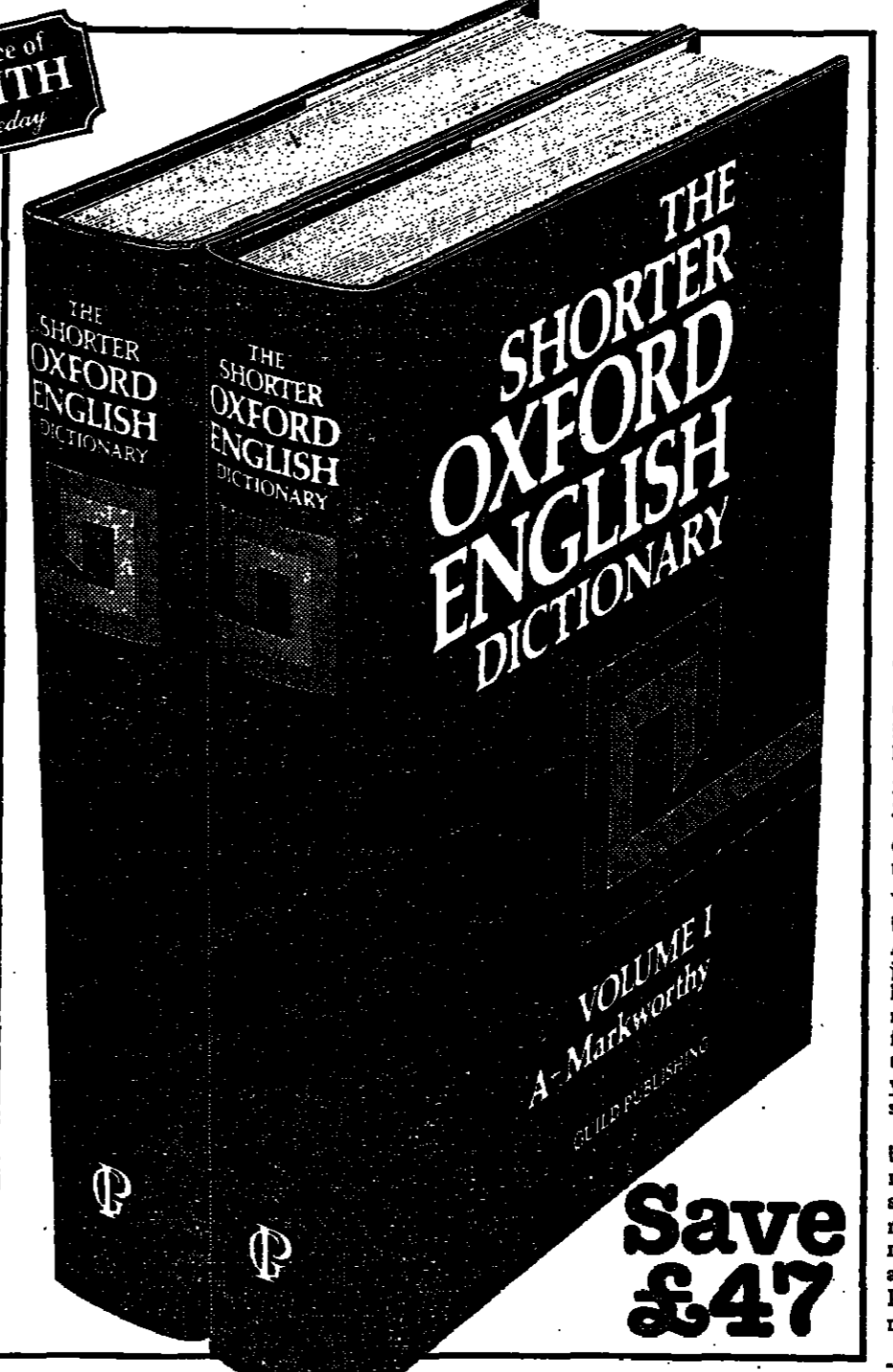
It's the quintessence of the parent work. But with 163,000 entries it is far bigger than most dictionaries on sale today. (Can you find *parrock* or *tap-lash* in your current dictionary?)

You'll also discover it contains far more illustrative quotations than other dictionaries - chosen from 1,523 authors. And there's a whole host of new words to bring it right up to date. From *byre* to *upright* ... from *biodegradable* to *xerographic*.

- Which spelling is correct?
- 1 abattoir/abattoir
 - 2 accommodate/accommodate
 - 3 braggodocio/bragadoccio
 - 4 desiccate/dessicate
 - 5 pavillion/pavillion
- ANSWER
1. abattoir/abattoir
2. accommodate/accommodate
3. braggodocio/bragadoccio
4. desiccate/dessicate
5. pavillion/pavillion

© 1986 by W. H. Smith and Sons Ltd.

Published at £55 YOURS FOR £17.99 +p.&p.*



- ★ 163,000 entries.
- ★ 2,672 pages.
- ★ Each 11" x 8 1/4".
- ★ Full-size readable type.

Normally published at £55, this magnificent two-volume Dictionary is yours for only £17.99, plus p. & p., as your introduction to the many bargains ahead in The Literary Guild.

Then save, save, save ... on the books everyone's talking about. As a member you'll continue to save pounds on today's best books. At least 25% OFF publishers' prices - sometimes as much as 50% OFF. The latest fiction. Humour. Children's books. Cookery books. Superbly illustrated reference books. And books of top TV series. All of them full-length, hardback editions.

You won't have to wait for these new books - you'll be offered the latest titles as soon as they're published. We are able to offer these hot-off-the-press books at such great savings because we negotiate with all the leading publishers and buy very large quantities at reduced costs. There's no difference in quality, of course - just £££s lopped off the publishers' prices.

You do NOT have to take a book every month. All we ask is that you choose just four books, from the many hundreds offered in your free monthly magazines during your first year. After that, you are free to choose as many or as few as you wish. All of them at great savings.

It's high time you started buying your books this economical way. Ask to see this superb two-volume Dictionary right now. But please send no money with the coupon. If you are not delighted, just send the Dictionary back and owe us nothing.

To: The Literary Guild, P.O. Box 198, Swindon SN3 4PX. 1

Please accept my application and enrol me as a member of The Literary Guild and send me the two-volume Shorter Oxford English Dictionary. If I decide to keep it you will charge me only £17.99, plus £2.50 post and packing. If I am not completely satisfied I may return both volumes within ten days, my membership will be cancelled and I will owe nothing.

As a member I do not need to take a book every month. If I want another book instead of the Book of the Month (or if I want no book at all), I can say so on a form provided. I will, however, choose at least four books in the first year. All books are described in advance in the free monthly 'Literary Guild Review' and offered at 25% to 50% off the publishers' prices (plus post and packing). I am over 18 years of age.

Mr/Ms/Miss _____ BLOCK LETTERS

Address _____

Postcode _____

Membership of this club limited to one per household. TT620 Overseas send for details.

SEND NO MONEY WITH THIS COUPON

Your only commitment ... is to choose just four books from the many hundreds offered in your free monthly magazines during your first year's membership.

Should you ever have any cause for complaint about the Club's goods or services, you are invited to write direct to Book Club Associates, P.O. Box 198, Swindon SN3 4PX.

The Literary Guild
Britain's No.1 book club
P.O. Box 198, Swindon, SN3 4PX.

THE ARTS

Times critics report from London, Bristol and New York
Comedy of drunken errors

THEATRE

The Hostage Tricycle

Moutjoy prison did Brendan Behan the great favour of keeping him away from the bar long enough to write his first two plays, on his release, having mastered the trick sober, he proceeded to practise it drunk. The Hostage, his third and most celebrated piece, is an opaque froth through which a darker undertow may fitfully be glimpsed.

The play was first written in Gaelic in 1957, and the following year an English version was produced under the aegis of Joan Littlewood's Theatre Workshop. Remarkably, it has not been seen on the professional stage in London since Miss Littlewood's revival of 1972.

Nicolas Kent's boisterous new production presents an idealized Bohemian in the form of Saul Radomsky's splendidly tatty set, where peeling wallpaper, exposed laths and rickety banners splashed with the National colours conjure up a low-rent Dublin brothel.

However low the rent, none of the inmates can afford it - neither the working girls, nor the Anglo-Irish patriot Monsewer, nor even the IRA, whose arrival with a kidnapped British soldier provides the piece with a hook and a structure. Until then, the action resembles an overblown public anecdote, with the brothel's own-



Through a glass, darkly: Eileen Pollock and Eric Richard in the revival of Brendan Behan's The Hostage

ers camping out strategically at the foot of the stairs in order to waylay the defaulting tenants and to make token attempts at regulating the disorderliness of their house.

At this remove, it is hard to judge the precise extent of Miss Littlewood's rewriting, but it seems fair to say that Behan's acerbic view of Anglo-Irish relations would have been better served had a note of genuine menace been introduced. Terrorism may sometimes be seen as a ghastly sick

joke, but even in a stage comedy its exponents ought to have substance. Here, the IRA come across as cartoon characters - obtuse and moralistically repressive - and the fate of the kidnapped soldier struggles to become the central concern.

Instead, his brief affair with the convent-raised housemaid provides the only sane relationship on offer, and the latter's closing speech, in which she upbraids the elder generation for their selfish blindness, seems

an odd conclusion to what has gone before.

Eric Richard and Eileen Pollock make a decent fist of the presiding couple. P.G. Stephens is excellent as the bagpipe-playing Monsewer, and there is an engaging debut from Catherine Cusack as the not-so-innocent maid. Heather Tobias upstages them all as the pious hussy Miss Gilchrist.

Martin Cropper

Dissident irony

Largo Desolato Theatre Royal Bristol

When I visited Vaclav Havel in 1969, he was being interrogated by the Czech security police for up to seven hours a day (or night). It got in the way of his work. Since then he has been in and out of prison, thrust into mind-killing jobs, and generally harassed. And it has taken its toll.

The occasional pieces that have been smuggled to the West are not what you would have predicted from the brilliant young author of The Garden Party and The Memorandum.

In place of those lethally funny dissections of Czech bureaucracy, the later plays focus on the lonely figure of a victimized artist beset by petty officials and conformist acquaintances. Largo Desolato is another exercise in this vein; but, in Tom Stoppard's version, it emerges as a wonderfully comic and unself-pitying piece of work: a nota-

ble instance of how adversity can sharpen the power of irony.

The hero, Leopold - a dissident writer as usual - has been under surveillance for so long that he can think of nothing but the next knock on the door. He does not wait in vain. The irony is that most of his visitors are well-wishers.

His mistress and assorted friends pop in to remind him of how much they expect of him, and express doubts as to whether he is quite the man he used to be. All they do is waste more of his time and intensify his writer's block. They are the real interrogators. When the security men do arrive, with a proposal to get him off the book, it is almost a relief.

What Havel is writing about is the readiness with which society urges some isolated champion to fight its battles. And the brilliance of the piece is that it extends beyond its own country to the civil rights public at large.

Claude Whatham's production catches the precise atmosphere of hallucinatory realism that Havel shares with Kafka. It is a visible extension of John McEnery's definitive Leopold, a twitchy, woe-begone wraith, forever haunting the spy-hole and retreating to a couch with a blanket drawn up to his neck, although a brokenly pathetic figure. Of course, in the end he still says no.

Excellent supporting performances come from the schoolmasterly Barrie Cookson and the carnivorous Meg Davies.

Irving Wardle

Fun from the fringe

The American musical may be gasping for breath on Broadway, but Off Broadway it is refreshing fresh air. The erstwhile setting for the experimental is ironically home right now to the comfortably commercial.

Economics have cast such a pall over both audiences and producers of Broadway musicals that they have all but forgotten the light-hearted joy of just having a good time (though Me and My Girl is a reminder). Olympus on My Mind (Lamb's Theatre) might once have enjoyed a Broadway run, being a modest relation of A Funny Thing Happened on the Way to the Forum and The Boys from Syracuse.

As Cole Porter did, but somewhat more seriously, in Out of This World, Author-lyricist Barry Hansen and composer Grant Sturiale have taken the Amphitryon story and set it to music - music which lingers not but is pleasant in the passing. Instead of Plautus or Moliere, they cite as their inspiration Heinrich Van Kleist, whose Amphitryon has been called the most heartfelt and humane of the treatments. So it seems in this version, while being simultaneously a send-up of several musical comedy traditions.

The tripe-chord chorus has no sooner introduced itself as Tom, Dick and Horace when Delores (Rusty Riegelman) stumbles out. She is the quintessential dumb chorine who explains that she got on stage because her husband, Murray the Futzler, backed the show.

There is also a ripe peach of an Alcimene by Emily Zachs-

ries and a first-rate doubling of Jupiter - à la Bob Newhart, alternately cocky and crestfallen - and of Amphitryon - as a confused straight-man - by Mark Zimmerman. He is an understudy, which testifies to the quality of the production.

Lady Day at Emerson's Bar and Grill (Westside Arts Theatre) also recalls ancient drama - in this case tragedy. A few months before her death, jazz singer Billie Holiday is playing a seedy Philadelphia club. Explaining that "I gotta sing the way I



Lady Day: Lonette McKee

feel. I gotta sort of roam around and let a song fill me. she tells and sings of her life.

Accompanied by a three-piece jazz band in 15 numbers including "God Bless the Child", "Strange Fruit", "Them There Eyes", and "I Ain't Nobody's Biz-ness If I Do", Lonette McKee, as Billie, sings as if her voice were alternating woodwind instruments, with an occasional glint of brass. She isn't haunting like the legend she plays,

Holly Hill

A conductor at war with his work

CONCERTS

Philharmonia/Sinopoli Royal Festival Hall

If not a better concert than Sinopoli's on Saturday night, this was certainly a more interesting occasion, if only because his vision of Elgar's First Symphony was so endlessly weird.

Of course, one had to accept the complete absence of the long line. Sinopoli made plain that condition at the outset, dividing the motto melody into several wailing phrases.

The change from this tentative opening to the loud, brassy immediate reprise was just the first indication of this conductor's liking for the boldest possible contrast. The stage was set for a war between conducting will and almost everything else has hitherto considered Elgarian.

Determinedly anti-traditional performances can be salutary and, in little bits, this one was: there were sudden turns that were expertly spring-cleaned, like the swish of woodwind near the start of the finale.

But much else suggested rather a failure of understanding, or else a failure to communicate the basics.

Nothing is gained from the muddled textures that were heard in the more complex parts of the first movement and again at the start of the scherzo, which was not so very fast that articulation could not have been an awful lot more precise than it was.

Nor is there much to be said for a view that finds scattered, even tattered fragments opposing one another crudely in the sections of deepest turmoil. Potential disintegration is a lot more telling than real incoherence.

Once again, the essential problem would seem to be Sinopoli's tastes for strong beat and flexible tempo at the expense of metrical frame.

The alternative explanation - which I can hardly believe - would be that one has to grow up singing, "Half a pound of tuppenny rice", in order to be able to phrase Elgar's dotted rhythms.

The first half of the concert included a noisy Master-singer's overture and a performance of Haydn's D major cello concerto featuring the Philharmonia's principal, Andrew Shulman.

He seemed a reluctant soloist, suggesting the shyness and dark tonal severity of a deepened viola, but his lack of exhibitionism was nice in some of the trickery.

Paul Griffiths

Bringing Weber back to the future

The Age of Enlightenment/Norrington QEII

Weber is usually regarded retrospectively as the visionary pioneer of German music-drama, the precursor of Wagner, the musician whose own colourful life story seems the very stuff of later Romantic opera plots.

None of this is incorrect; he did indeed start something bigger than he knew. But the one-sided viewpoint inevitably diminishes his achievement; it makes his music seem unsatisfying or incomplete in itself.

The outstanding aspect of this spirited concert (one of too few British events celebrating Weber's bicentenary) was that using period instruments firmly fixed Weber in his own age, not as forerunner of the future.

In this context his progressive forays sounded even more astonishing. What a contrast, for instance between the youthful Symphony No 2 - which, for all its quirky, asymmetric phrases, rests on a conventional base of sub-Haynesque classicism - and the moody passions of the new world revealed in the Oberon and Freischütz overtures.

The Age of Enlightenment - the recently formed original-instrument orchestra, playing here under Roger Norrington's imaginative direction - offered many revelations.

To cite just one striking example: Weber's generous melodic writing for horns is usually delivered on modern instruments in a creamy, legato.

On the natural horn, however, the necessity of "stopping" some notes gives it a more primitive, rather jagged quality. Weber obviously took this into account, for the stopped notes usually coincide with stresses in the tunes.

Major problems still remain for "original instrumentalists" playing 19th-century repertoire. Balances must constantly be rethought - what happened to the flute tunes in the symphony? - tuning is an intractable problem, and the calculation of string vibrato is a contentious matter.

Not everything was perfect here, but the exhilarating sense of adventure was infectious.

Three fine soloists enhanced the evening. Antony Pay did not always get his clarinet speaking with an even incisiveness in the Concerto No 1, but his timbre had splendid body and his embellishments were fun.

Even more fun was Melvyn Tan's fortissimo playing in the F minor Konzertstück. Here was an ideally flamboyant exponent: equal to the virtuosic flourishes, yet coaxing some surprisingly tender tone.

And two majestic contributions came from the soprano Elizabeth Connell, in glorious voice for the great leaps and swoops of "Ocean! thou mighty monster" (Oberon), then revealing a delicious sotto voce in "Leise, Leise" from Der Freischütz.

Richard Morrison

Big Mac politics

Reading First Among Equals I was marginally put out to find myself bursting into tears at a passage where the svelte Tory MP Simon Kerslake writes a letter of apology to his humble opponent, Raymond Gould. "I envy the respect in which the whole house now holds you," he says, alluding to Gould's honourable resignation, in prose which has made Jeffrey Archer the McDonald's of the political thriller.

Well-stocked with paper hankies for the same sequence in Granada's epic adaptation, however, I found myself adopting the sedentary position of the cast, who are to be found slumped in expensive restaurants, clubs and the House of Commons.

To enjoy an Archer novel it is essential to clamber between his lines. On screen, there is no such escape. Nor does the screen version convey any of the excitement of a political campaign. "We were really caught off-guard this time," says the outgoing Prime Minister, alerting us to the fact

TELEVISION

that a General Election has taken place.

Lanced of such excitement, First Among Equals is reduced to the level of bored viewers going green at excesses like "I'm sorry about tonight, it's the Select Committee first thing." Arriving at Westminster, their menfolk are invariably greeted with news that their job description has changed. "And give up Environment?" squeaked Charles Seymour, when ordered to become a Whip. "What is Environment?" asked his brittle Sloane of a wife, typing out her biography of Lady Jane Grey with one finger.

It was all moderately well-acted, phishy set and professionally directed by John Gorrie - but in terms of passion it generated the heat of a cold hamburger.

No Place Like Home (BBC1), a tasteless sitcom scripted by Jon Watkins, depended for its laughs on couples undergoing a trial separation. The humour was on the level of "he is trying," "yes, he is, very". Occasionally, the acting reached this level too.

Under Sail (BBC2) continued a pleasant series with a look at the West German training ship, Gorch Fock. There are few more beautiful sights than a boat with a full petticoat of sails and Brian Hawkins' film was an undemanding tribute to this square-rigger.

Nicholas Shakespeare

ROCK

Curtis Mayfield Piccadilly Theatre

Despite his lowered profile - a reduced touring schedule and only one album in the past four years - Curtis Mayfield attracts a sizeable audience of devout followers and gland-handing industry types alike. Both groups remember him with affection as the Chicago-born leader of The Impressions, one of the few r & b/soul acts to challenge the Sixties hegemony of the Stax and Motown labels, and later as the solo star who contributed to the radicalizing of soul music.

What the noisy contingent gathered round the back bar failed to take on board was that a performer of Mayfield's restrained and subtle grace needs rather quieter attention than that accorded to most rock acts: this performance, together with recent gigs by Ted Hawkins and Harvey and the Wallbangers, convinced

DANCE

Royal Ballet Covent Garden

Whereas Jerome Robbins' privileges as a guest choreographer have resulted in his two ballets at Covent Garden being given with a single cast, the works by house choreographers are subject to changing distribution. Practical considerations dictate this - to cover emergencies and give more people roles - but it is not always artistically desirable.

Ashton's La Valse, being a big ensemble work, has not suffered from having different soloists. Indeed, Monday night's trio of women (Diedre Eyden, Tracy Brown and Sharon McGorian) was the best so far in poise and attack.

The ballet's group effects really need a raked stage to be seen properly, and a bigger one to avoid cramping, but the company responded well to a greater use of rubato in Isaiah Jackson's conducting.

David Sinclair

Because David Bintley's Galanteries consists mainly of solos, duets or trios, every dancer is crucial, and an almost complete change of soloists weakened the effect considerably. The best of the replacements were Phillip Broomhead in the first duet and Ravenna Tucker in the first solo, but even these were less suited than the dancers the ballet was created for.

The music comprises Mozart's Divertimento K205 and Serenade K101 - shuffled together, but making a smooth progression. Bintley has matched it with a fluent, apt arrangement of academic steps, sometimes with an individual twist, as in the flurried lifts of the first trio.

Bintley has let the music guide him into sequences for the featured dancers that are gracious, playful and gallant. Only the opening ensemble, with four women joining the eight soloists, looks conventional, busy and too symmetrical; the ballet might be improved by reworking for a smaller cast, perhaps using the first movement only as an overture.

John Percival

Advertisement for Nescafé BLEND 37. The ad features a large image of a Nescafé BLEND 37 can and a cup of coffee. Text includes: 'For your particular pleasure...', 'Nescafé BLEND 37* is for those with a taste for the good things in life.', 'Richer, darker, distinctly continental - it is especially appreciated by the coffee connoisseur.', 'If you haven't tried it yourself, please accept this invitation to enjoy Blend 37 - at 15p less.', 'It's a promise of particular pleasure.', 'Nescafé BLEND 37 Richer, Darker, Distinctly Continental.', '15p OFF', 'NESCAFÉ BLEND 37', 'VALID UNTIL: 1st NOV. 86'.

T H E N E W 1 9 8 7 C A V A L I E R .



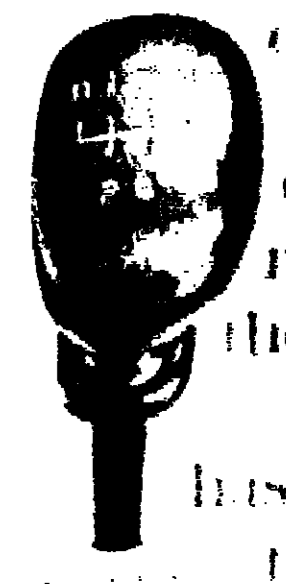
Now it's our turn to be more than generous with the Cavalier.

T H E N E W 1 9 8 7 C A V A L I E R .

SINCE LAUNCH, 16 UK AND INTERNATIONAL AWARDS, INCLUDING: ABOVE: THE WORSHIPFUL COMPANY OF COACHMAKERS AND COACH HARNESS MAKERS, FIRST PRIZE AND CERTIFICATE OF EXCELLENCE, CAVALIER CONVERTIBLE, 1986; WHAT CAR? FAMILY CAR OF THE YEAR, CAVALIER 1.6 GL, 1982 AND 1983; ASSOCIATION OF CAR FLEET OPERATORS, CAR OF THE YEAR, 1985 AND 1986; AUTOCAR, TOP TEN TESTS, FIRST IN CLASS, 1981; THE PLEASUREWOOD HOLIDAYS IN FRANCE/MOTOR MAGAZINE HOLIDAY CAR OF THE YEAR, 1985.

12
 Ter
 of f
 E
 I
 of E
 can
 that
 gre
 mal
 It
 wen
 but
 pati
 slov
 thin
 alw
 agai
 So
 und
 rap
 C
 hav
 con
 mu
 virt
 bod
 the
 me
 just
 can
 ma
 bec
 wo
 A
 in
 noy
 poi
 UK
 be
 ob
 sen
 cus
 e
 by
 of
 stil
 get
 car
 Th
 wh
 fro

since
 has
 been
 it
 was
 words
 of
 the
 mot
 it
 was
 to
 car
 and
 a
 mot
 But
 w
 to
 rest
 up
 Here
 the
 caval
 foot
 of
 the
 A
 has
 bus
 has
 bus
 And
 a
 consid
 erable
 seat
 course
 are
 Under
 have
 burnt
 They've
 performan
 Convertible
 A new
 optimised
 the
 lions
 It's an
 responsive
 own
 respect
 need
 are
 And, w



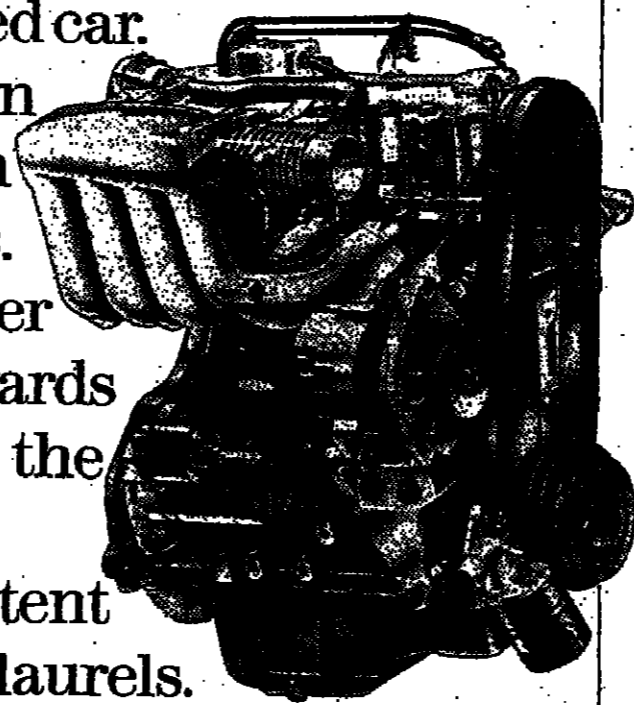
B E T T E R . . . B Y D E S I G N .

Since its launch, the Vauxhall Cavalier has been a much lauded car.

It was quick to earn words of praise from the motoring public.

It was even quicker to earn copious awards and accolades from the motoring press.

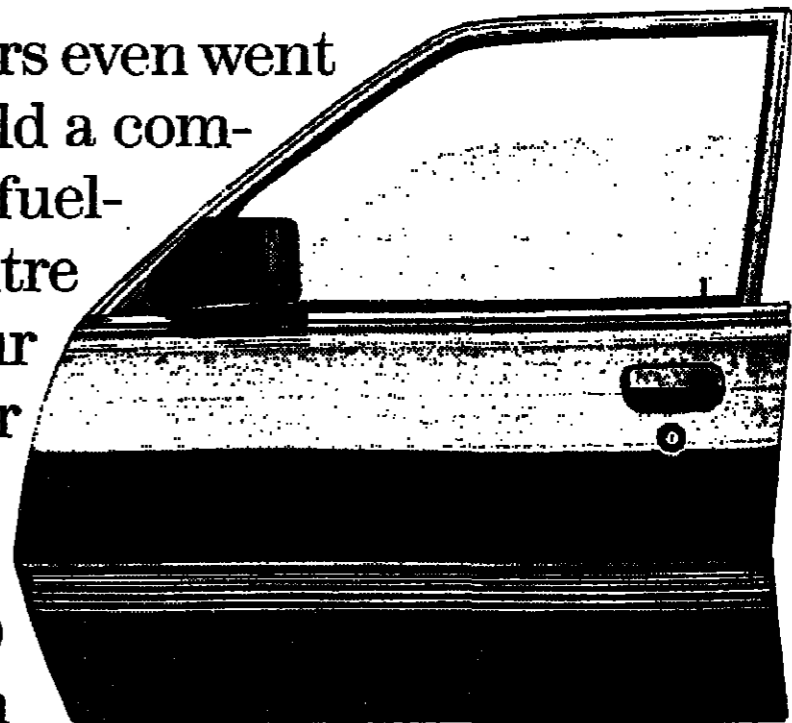
But we weren't content to rest upon our car's laurels. Hence the new 1987 Vauxhall Cavalier that's parked at the foot of this page



THE NEW 2.0 CD BOSCH FUEL INJECTED ENGINE. TORQUE OPTIMISED FOR EASIER ACCELERATION.

without guzzling one extra drop of precious fuel.

Our engineers even went so far as to build a completely new fuel-injected two litre engine for our revised Cavalier CD. It moves from 0-60 in a shade under 10 seconds and can go on to deliver



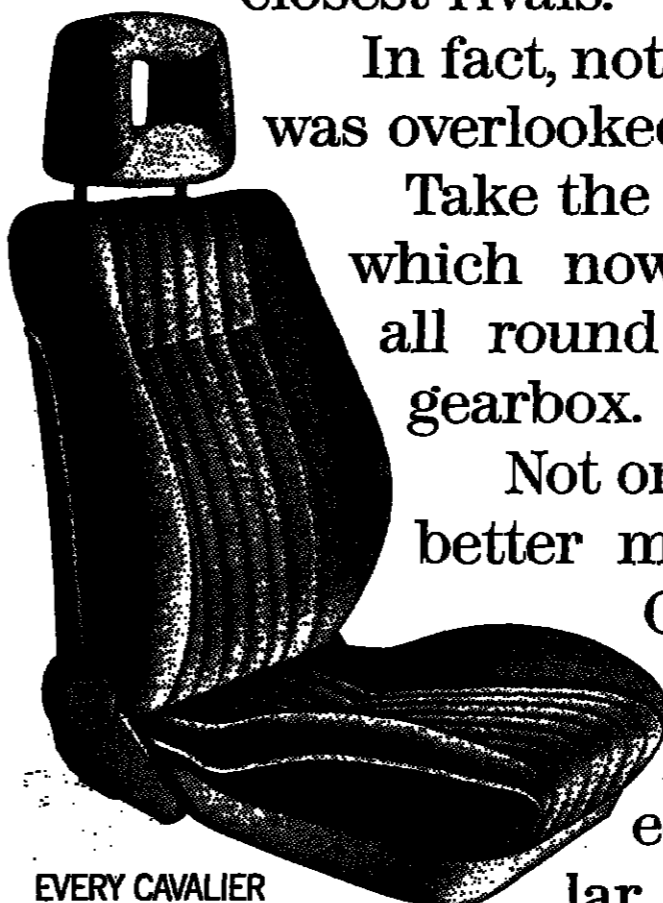
THE GL AND GLI NOW HAVE CENTRAL LOCKING WHILST THE GLSi HAS ELECTRIC FRONT WINDOWS.

a top speed of up to 116mph. And it offers much more punch at lower revs than its closest rivals.

In fact, not one single Cavalier was overlooked.

Take the 1600L, for example, which now has tinted glass all round and a five speed gearbox.

Not only does it give even better mpg., but like most Cavaliers, it further boasts a lower price than a Ford Sierra equipped to a similar level. Both the GL and the GLi benefit from the



EVERY CAVALIER HAS A MORE LUXURIOUS TRIM LEVEL.

additional luxury of having central locking.

The GLSi sports brand new alloy wheels and electric front windows.

And the SRi has striking new body mouldings on its skirts, sides and rear, plus a colour-coded rear spoiler and door mirrors.

As you can see, the new 1987 Cavalier has more than enough to impress even the most discerning members of the general public.

Including, we trust, those that sit upon award juries.



BACKED BY THE WORLDWIDE RESOURCES OF GENERAL MOTORS



THE CAVALIER L NOW HAS A 5 SPEED GEAR BOX AS STANDARD.

They redesigned and colour-coded the front, they tidied up the rear, and refurbished much of the interior.

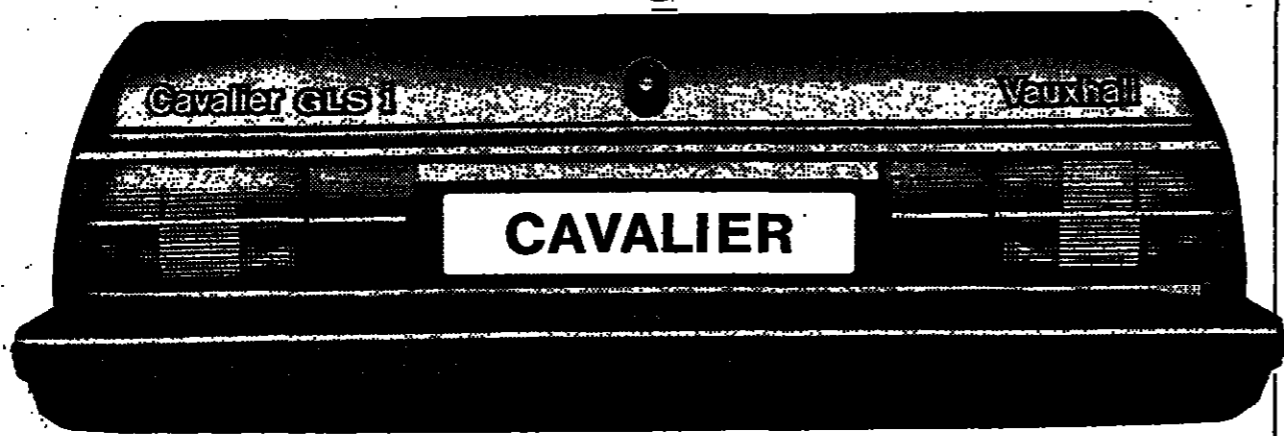
Thus every new Cavalier model has a more luxurious trim level than its predecessor.

The new CD, for instance, is now decked out with a smart new chain velour upholstery.

Whereas the SRi sports a spanking new striped design.

And on top of all this, no model is considered too lowly for height adjustable seat belts (three rear seat belts, of course, are now also standard).

Under the bonnet our engineers, too, have burnt the midnight oil.



FOR 1987, ALL CAVALIERS HAVE A NEATER, SLIMMER TAIL.

They've further improved upon the performance of the GLi, GLSi, SRi and Convertible models.

A new Bosch fuel-injected torque optimised 1800 engine should be given the lion's share of the credit.

It's an altogether livelier, more responsive beast, coming into its own especially when quick bursts of speed are needed for overtaking.

And, would you believe, it does so

B E T T E R . . . B Y D E S I G N .

MANUFACTURER'S PERFORMANCE FIGURES. DOT FUEL CONSUMPTION TESTS MPG (LITRES/100 KM) FOR CAVALIER GL/GLSi/CONVERTIBLE (5-M): CONSTANT 56 MPH 50.4 (5.6); URBAN CYCLE 27.2 (10.2); CONSTANT 75 MPH 38.2 (7.4). SRi (5-M): CONSTANT 56 MPH 46.3 (6.1); URBAN CYCLE 26.6 (10.6); CONSTANT 75 MPH 34.9 (8.1). 1600L (5-M): CONSTANT 56 MPH 49.6 (5.7); URBAN CYCLE 28.8 (8.8); CONSTANT 75 MPH 37.1 (7.6).

End of the Old Boy network

The City gravy train is nearing the end of its line. Markets are being thrown open, the

BIG BANG

Japanese are poised to pounce, and the new watchdogs are already growling. Bryan Appleyard, in his final report, looks at the battles ahead

Part 3: The threat of foreign giants

Michael Hawkes, chairman of Kleinwort Benson, is not your average Big Banger. Indeed he seems weary by the whole thing. Apart from anything else, he knows that, in the short term at least, the Bang is bad news for profits. Everybody is piling money and personnel into the London market but there is nothing like the level of business to support them. Something like 90 per cent of all gilts business, for example, used to be handled by two jobbers. After October 27, there will be no less than 27 market makers in gilts. The reason is that gilts represent by far the biggest and tastiest morsel on the London Stock Exchange and everybody wants to be in there. The first problem was that there were far too few experienced gilts dealers to staff the new market makers. And in this market, that is doubly important. Short of burning £50 notes to heat the office, there are few more efficient ways of losing money than getting your gilts settlements wrong at the end of the day. The millions can simply evaporate.

In addition, the Japanese have yet to make their move. This could prove critical for the future shape of the City. Nomura, the biggest of the big four Japanese investment houses, dwarfs even the Americans. It made £1 billion profit in 1985 and has a market capitalization of £20 billion. Its foundation lies in the investment collection boxes in millions of Japanese homes which Nomura girls empty regularly and invest in the chosen stocks of the month. But so far Nomura has played a quiet game. It has registered as a bank in London and become a member of the Stock Exchange, but it has not acquired any London dealers. The theory is that the Japanese are perfectly happy to take a very long view indeed and they may be waiting for the first or even the second Big Bang shakeout before they move into the market in a big way.

Even so, they may not be as fearful as their immense financial muscle suggests. Their market experience at home is of a highly-controlled environment with little demand for investment instinct or even analysis.

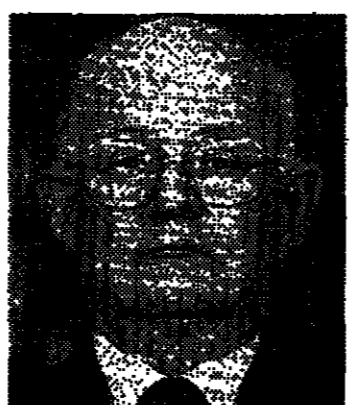
British bond dealers taken on by one Japanese house in London were startled to be given a list of names and telephone numbers and told to get on the phone and sell them Yen Bonds. One baffled recipient of one of these calls turned out to be a scrap dealer in Barking and all the others were equally unlikely purchasers. The Japanese bosses seemed to have simply been flicking through the Yellow Pages. On the other hand, of course, we used to laugh at Japanese technology.

In the medium term the threat of the foreign giants is serious for the British houses. In the case of those companies backed by a major bank like Barclays, NatWest or Midland, they retain the advantage of a huge capital base. Nevertheless, along with everybody else, they must fight to retain the loyalty of British investors. They must hang on to the "placing power" to sell stock in Britain better than the Japanese or the Americans and combine that



Survival of the fittest: Michael Hawkes - 'It's the only way everybody else will get back into profits'

with a competitive international business. Meanwhile, the shocks to the City's system are due to continue long after October 27. Next year, all being well, the new Financial Services Act will come into operation. Again this is a product of recent traumas in the Square Mile's history.



Sir Kenneth Berrill

'The City's watchdog will clearly err on the side of toughness'

It has always been a fundamental element of the City's belief in itself that its operations are best regulated by its own people. By and large, given the specialization and complexity of its operations, outsiders were prepared to accept this. Short of actual fraud, when the police had to get involved, self-regulation by the mandarins of the old school seemed the best method.

According to your point of view this was either naive or cynically self-interested. It was naive in that it was based on some of the old City idealism that believed that a gentleman's word was always his bond and once a man went bad he would never be allowed back in the Square Mile. It was self-interested to the extent that the old City wished to preserve its privileges and cosy abuses without outsiders interfering.

Unfortunately in the 1970s, the years after the property crash and the secondary banking crisis, rulebreakers were all too obviously getting back on the City gravy train. Furthermore, cosy City deals were beginning to look a little too flagrant. There were, for example, the dawn raids in which companies

pounced on takeover targets, mopping up their shares at a premium price in the first few minutes of trading. It was all good fun but it clearly involved backroom deals that cut out the small investor and created a preferential pricing system. On top of that there were genuine, full-blooded scandals like the Norton Warburg affair which the authorities seemed powerless to control.

With increasing internationalization such failures began to look a little embarrassing. The Americans, for example, operate a ferocious system of legal controls through the Securities and Exchange Commission while we simply seemed to be muddling through. In 1981 John Biffen appointed Professor Lawrence Gower to look into it. He produced a report that broadly backed the idea of self-regulation but in a much tougher form.

Now every investment firm will have to be authorized and all their salesmen will have to pass an exam set by a new body, the Securities and Investments Board (SIB). The SIB will be the supreme

SHORT LIFE OF THE WHEELER DEALERS

The Big Bang means the end of the old City style. The traditional career pattern meant that young men joined the right firms and worked their way slowly upward to emerge in their fifties as partners with access to spectacular rewards. Throughout this process they were expected to wear the right clothes, live in appropriate houses and, frequently, marry the right wife. The young men could come either from the upper classes or, just as frequently, they came in from the East End. The City has traditionally adopted bright East End boys, dressed them in the right clothes and turned them into dealers. They were quick-thinking and had traders' instincts.

With the growth of the Euromarkets these "Barrow Boys" tended to move away from the Stock Exchange which became more the haunt of their languid "Hooray Henry" colleagues. And now they have been joined by the slicker, outward-looking, international middle-class kids who expect to make their fortune by the age of 35. The Henrys are on the run.

For the new wheeler-dealers the idea of a long-term career has largely gone. They work from 7 in the morning, dealing between To-

kio close and New York opening. Unlike the last generation they do not live in the suburbs - they can't afford the travelling time. They live in Chelsea and Belgravia, busily fuelling the central London property boom. They drive BMWs or Porsches - without exception. They are reckoned to have net worth of 25 and 35 - by which they should have a vast little pile for the rest of their lives while the City has brought in the new generation of clones.



WHAT THE BIG BANG MEANS TO YOU

Dealing in shares costs money. In the pre-Big Bang market all stockbrokers charged clients a fixed commission depending on the size of the deal. Big transactions of £1m plus were charged as little as 0.125 per cent while deals of up to £7,000 cost 1.65 per cent.

But after the Bang, commission will be negotiable. In theory this should mean that competition will force prices down. At the top end of the market this will be true - the big investing institutions will be powerful enough to shop around and force down their costs.

But the private client is expensive to service and his dealings are minute compared with those of the pension funds. After the American stock market moved over to negotiable commissions private client dealings actually became more expensive.

So, in the short term, the Big

Bang may be bad news for the small man in the longer term, however. It may work to his advantage. The reason is that the new technology associated with the Bang will eventually offer the opportunity to buy and sell shares through a computer terminal in your local bank. The computer itself would find the best price for you and several layers of middle-men would be eliminated. Costs would be cut.

For the expert private investor who finds it worthwhile to stay in the market anyway the Big Bang will mean faster dealing and access to wider markets. For the amateur who expects to talk at length to his broker before making a move, the City will be a less friendly place. Talking time is expensive, but smaller firms may still be able to oblige and so will specialized offshoots of the big groups.

authority over an expected 15,000 registered firms and beneath it will be a series of self-regulatory organizations (SROs) which will run particular sectors. In addition there will be recognized investment exchanges (RIEs) - the market places authorized by the SIB.

So, having deregulated its markets with the Big Bang, the City is about to reregulate its control systems. And, in some ways the reregulation is almost as much of an unknown quantity. Because a large part of the largely self-regulating mechanism remains, much depends on the personalities who operate the system. Sir Kenneth Berrill, chairman of the SIB, is clearly going to err on the side of toughness. "The SIB is going to be much more like the American SEC than a lot of people imagine," he says.

In effect that means that the new Financial Services Act will be the last of many nails in the coffin of the old City. Gone will be the cosy warmth of the Old Boy network and the discreet fixing of deals by ancient jobbers in gloomy pubs. Abuses will probably continue but they will occur in fractions of a second in the bowels

of computers and, if discovered, they will be unravelled and investigated by computers themselves.

Taken alongside the Big Bang of the international and domestic markets, it means that in five year's time almost all the ancient, English fabric of the City will have gone to be replaced by a fully internationalized financial sector. There will be nothing much to distinguish the Square Mile from New York or Tokyo.

Its inhabitants will be the same rich, cloned kids and their glossy bosses. Barbarians all, they will lack the ancient, cultured patina of the old staggers with their languid habits and appalling arrogance. Another bit of Old England will have gone, but at least in this case it deserved its fate.

Yet most people believe the medieval boundaries will retain some of their mystique. London remains the most concentrated financial centre in the world and, tearing themselves away from their computers, people still like to have lunch or to hustle for better job offers in champagne bars.

THE TIMES WOOL SWEATERS

These high quality fine-knit V-neck sweaters have the unmistakable softness of pure wool and are stylishly designed to look good on both men and women. The V-neck is a classic practical style, and the easy-fit raglan shoulders and ribbed neck cuffs and hem make these sweaters both smart and very comfortable. Team them with casual clothing for everyday leisure wear or with tailored skirts and trousers for more formal occasions. Scottish-made from 100% Botany wool, they can be hand-washed or dry-cleaned, returning to their silky softness every time.



To add an extra touch of distinction, we have arranged for some of the sweaters to be embroidered on the left breast, with 'The Times', in the paper's own typeface. Choose from the following: Navy blue with white embroidery, Wine with gold embroidery and Light blue with navy. Sizes: Small (34"-36"), Medium (38"-40"), Large (40"-42"), Extra Large (44"-46").

PRICES: £19.95 with logo £18.95 without logo.

The Times Wool Sweater Offer, Bourne Road, Bexley, Kent DA5 1BL. Tel: Crayford 53316 for enquiries only.

THE TIMES

DIAL YOUR ORDER RAPID ORDERING SERVICE BY TELEPHONE OR ACCESS OR VISA (no need to complete coupon) (Crayford) 0322-58011 24 hours a day - 7 days a week

Scooping life's rewards

The new foreign editor of *The Daily Beast* is not in the least discomfited by suggestions that his face is better known than his name to millions of cinema and theatre patrons. Ambling about the set of a London Weekend Television production of *Scop*, the amiable Denholm Elliott professed himself quite pleased to be considered just a vaguely familiar face in the crowd. "People do come up to me in the street and say they enjoy my work, without apparently having a clear idea who I am. I don't regard that as an insult, but rather as a compliment. I think to be an actor you should be invisible, rather than a celebrity playing a role. That, to me, is the essence of acting."



Denholm Elliott: fantasy world

Fleet Street, involved a minor disappointment. He accepted the part with alacrity, after being told it would be filmed partly in Morocco, his favourite country. "Then I discovered the character I play doesn't go to Morocco. I was so furious, I went there for two weeks' holiday before starting rehearsals."

Elliott's relative anonymity, which has survived prominent roles in *Raiders of the Lost Ark*, *Defence of the Realm* and the currently successful *A Room with a View*, may be compromised shortly through an unexpected rendezvous with Woody Allen. "He first called me about eight years ago. 'Can you do an American accent?' he asked. So I did 'Hickory, Dickory, Dock' over the telephone. I gather he sort of fell over, as my American accent isn't very good, and that was the end of that."

Allen has evidently recovered from the experience, as he has written a part for Elliott in a film due to begin production in New York next week. A further blow to Elliott's elusive identity is in the offing with a role in *Empire of the Sun*, being filmed in China later this year by Steven Spielberg. In the meantime, the winner of several BAFTA awards who made his first stage appearance in 1945 is enjoying a second thespian childhood.

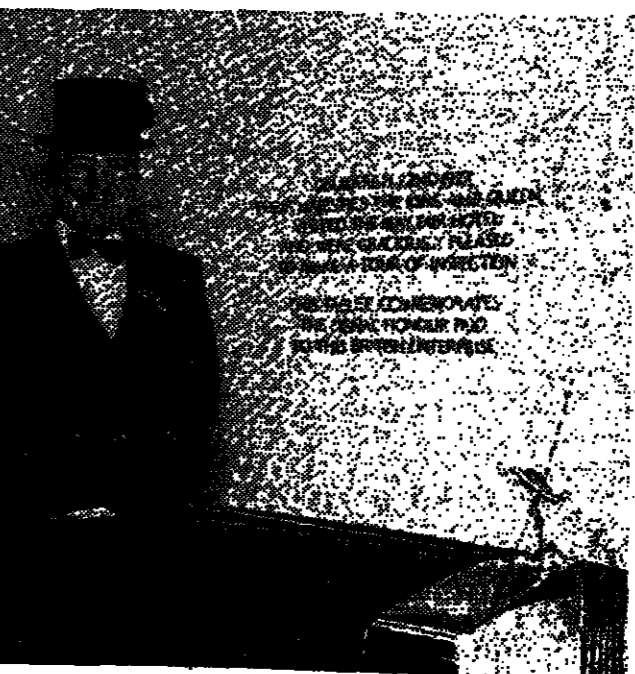
"I find I take a very relaxed attitude to acting. It's something I enjoy doing. I'm doing it now, at last, in the same way I used to do it as a kid, when I was eight, dressing up for mummy and daddy and going into a fantasy world... it beats work any day."

"I suppose there was a time when I wanted to play some vast part in the theatre, but I honestly don't now. I mean, I'd really rather stroll along a beach. I wouldn't mind doing a few weeks off-Broadway sort of thing, or in some fringe theatre in London. But I'm 64 years old, and I haven't exactly got years, have I? I propose to enjoy myself. That seems fair enough."

Gavin Bell

CONCISE CROSSWORD NO 1080

A crossword puzzle grid with clues. ACROSS: 1 Roman legion unit (6), 4 Sexual urge (6), 7 Illegal drug (4), 8 Swine food (8), 9 Rapids (8), 13 Permit (3), 16 Spring bean (7,6), 17 Father (3), 19 School food counter (4,4), 24 Upriser (8), 25 Ancestor (4), 26 Consumable (6), 27 Fast rope descent (6). DOWN: 1 Cipher (4), 2 Air force (9), 3 Spit (5), 4 Reasoning system (5), 5 Wail (4), 6 Sweetly (5), 10 Assign (3), 11 Mexican Indian (5), 12 Bird (5), 13 Spiny lobster (9), 14 Period (4), 15 Second-hand (4), 18 Sharp (5), 20 Uric acid salt (5), 21 Native Australian bear (5), 22 Restrain (4), 23 Seed appendage (4). SOLUTION TO NO 1079: ACROSS: 1 Landau 5 Pact 8 Roomy 9 Chuffed 11 Merchant 13 Reds 15 Double-crozier 17 Node 18 Hopeless 21 Arrears 22 Pease 23 Made 24 Vessels. DOWN: 2 Armour 3 Day 4 Unconsciously 5 Four 6 Coffers 7 Prima donna 10 Distressed 12 Hole 14 Core 16 Underdo 19 Esel 20 Hair 22 Pea.



SOME THINGS NEVER CHANGE

Our commitment to the traditional English values and standards of service has never changed. Next time you're in London, experience for yourself what our guests take for granted.

THE MAY FAIR INTER-CONTINENTAL HOTEL Stratton Street, London W1A 2AN. Tel: 01-629 7777 Telex: 26252

WEDNESDAY PAGE

When to save a baby's life?



At just three months, Jem Paterson (left) is the world's youngest heart-lung transplant patient. That he is alive is just one of the "miracles" of modern medicine.

Lee Rodwell asks: how far should we go to save a child's life? Or have we, as some doctors begin to fear, gone too far already?

In Middlesbrough General Hospital an unborn baby kicks inside its mother's womb. Twenty-four-year-old Deborah Bell, who suffered a brain haemorrhage when she was five months pregnant, is as unaware of these movements as she is of everything else. She is now being kept alive by machine so that her baby has a fighting chance.

anything does go wrong we assume that the wonders of medical science will put things right.

But there is a growing concern that we are moving too fast. Is it worth risking a woman's life, not to mention her ability to carry subsequent children to term successfully, for the sake of an operation that other doctors feel, as in the case of baby Mitchell, could have waited? And what effect would it have had on the baby? Being born once, after all, is supposed to be traumatic enough.

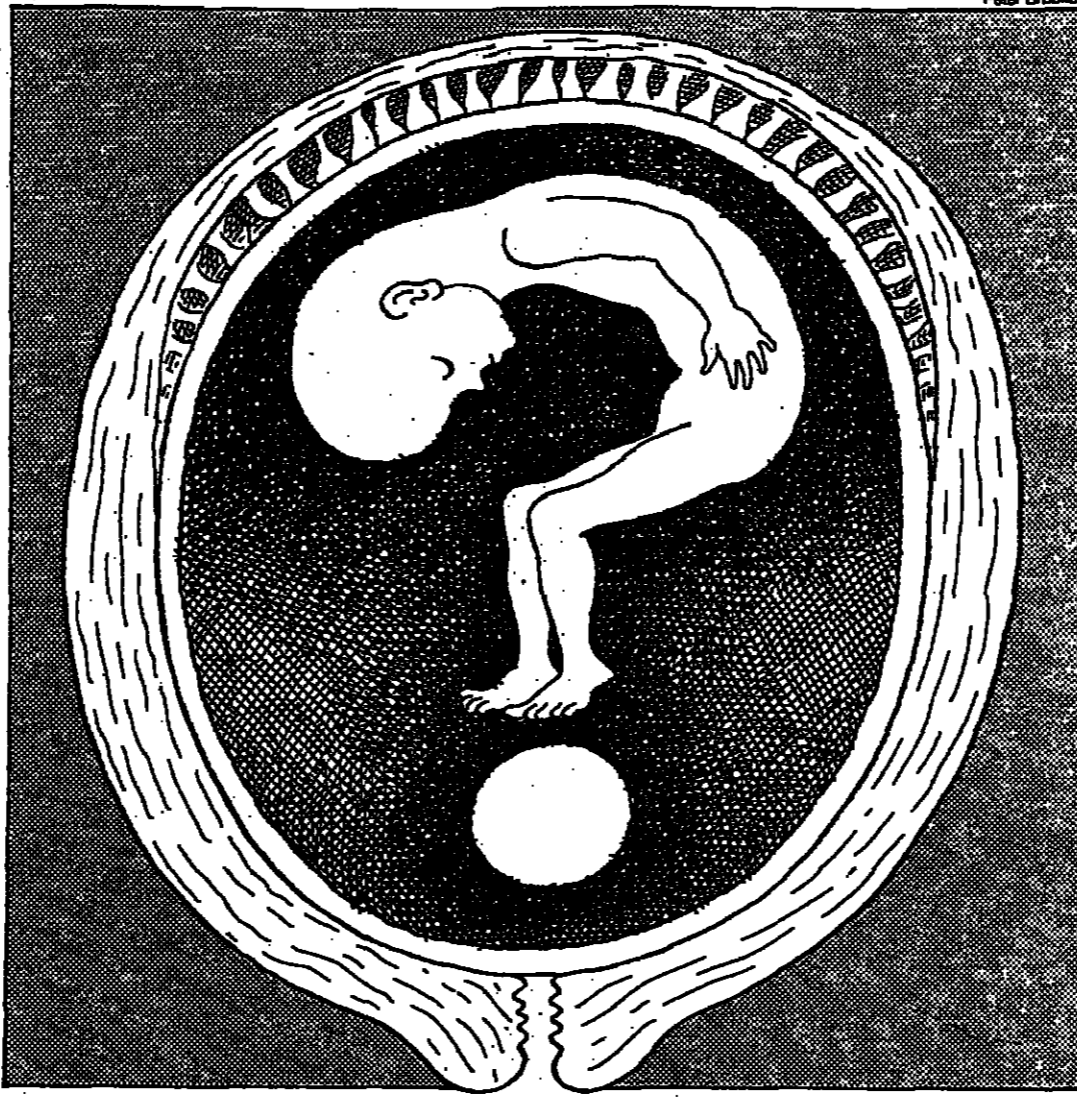
Back in Middlesbrough, it is easy to see why those who love Deborah Bell want her baby to live. But what kind of psychological pressures will be put on that child as it grows up, what kind of counselling have the family received? Indeed, how much help and support do any parents get when faced with life or death decisions?

'We try everything we can provided it is the parents' wish, and we are very honest with them'

controversy that surrounds him. He was "born" twice — the first time when a surgeon took him half way out of his mother's womb to operate so that a urinary blockage did not kill him before he grew to term.

Three different babies, three different stories about survival against the odds. But together they raise a question: how far should we go to keep a baby alive? It is a question that today more and more people — both parents and professionals — are being forced to ask themselves.

In Victorian times having a baby was a gamble with fate. Even if the mother survived childbirth, many babies failed to reach childhood. Only 55 years ago, in 1931, the first year that perinatal mortality rates were calculated, there was one death for every 16 births; now the rate is about one in 80 (13 per 1,000). Rationally we know that babies can still die or be born handicapped, but because the tragedy is no longer commonplace, we are not prepared emotionally for it to happen to us. Not only do we expect to be able to produce our 2.4 children without difficulty; if



into the baby's bladder and drain off the fluid. If the baby has a reversible obstruction, this can be corrected after birth. That way we can see how far the system has already been damaged. The trouble is, after the American report we are now getting mothers who feel they must be subjected to invasive techniques to save their baby.

no harm to wait until 34 or 36 weeks when you can deliver by Caesarian and correct the plumbing after birth.

Cliff Robertson sounds a note of caution about much of baby surgery, in particular about the prospects of heart-lung transplants, and raises questions about the long-term prospects. He said: "We

'The general feeling is that you should always keep your hands off the baby in the uterus'

don't know how ultimately successful a transplant would be. While it would be useful to give someone of, say, 45 an extra 10 years, to do that for someone of nought poses different philosophical problems." So should they be done at all? "If there were enough donors, I would be happy for a small number of operations to be carried out on carefully selected patients in hi-tech centres. But you need five to 10 years to answer the question as to whether the technique is viable."

Put another way, the argument is not simply about how far you

should go to keep a baby alive, but how you decide whether the quality of the life or the length of the life you have offered it is acceptable. Should we battle on to preserve some kind of life at any cost?

Only five years ago it was unusual for babies who were born weighing less than 800 grams to survive. Now the survival rate is much better. But Cliff Robertson says: "Follow-ups seem to indicate that of all babies born at low birth weights about 10 per cent will have some sort of neurological deficit. There are cases where it is possible to say that a very low birth weight baby will have such a growth handicap that it is probably not justifiable to carry on."

Dr Robertson also points out that the pressures on parents and professionals are different, depending on whether a child faces a mental or a physical handicap. He says that he has never had a parent question whether or not a baby should be operated on for a kidney or a heart disorder, whereas it is very common to question the idea of an operation when a neurological handicap is involved: "By and large I'm inclined to go along with the parents' wishes. If I had a baby with a major malfunction and the parents refused permission to operate, under most circumstances I'd go along with that, but I would

have to be sure they were carrying the rest of my staff with them."

Better techniques of pre-natal diagnosis — including methods like chorionic biopsy and the improved application of ultrasound — mean that more and more parents will be asking themselves, even before their babies are born, how far they want the medical profession to go to try to save their child's life.

Would it be better to leave it all to nature? Kypros Nicolaidis says: "Nature is very clever at times, but also very cruel. Humanity developed weapons to deal with snakes and lions, a primitive technology to deal with nature. We have

'There are grey zones where a lot of babies will die anyway and others will survive with handicaps'

developed medicine. As new scientific advances are made we go through an interim period where we assess new methods of treatment. We shall make mistakes, we shall have unreal hopes, but things will balance out."

Cliff Robertson believes that no matter how easily baby stories tug the heart-strings, it would help if we all tried to think of newly-born as no different from the rest of the population: "If someone is brain-damaged or whatever after a traffic accident, then, as next of kin, you may come to a point where you know you don't want them to have the amount of therapy that is going needlessly to prolong life for six months. You would say: 'I think it's appropriate to turn the ventilator off.' There are well-trodden paths down which you can go, whether the patient is five years or 55 years of age. Exactly the same paths can be gone down whether a baby is a few days or a few hours old. It's a mistake to try to make it a separate issue."

But for parents to make that kind of decision and for doctors to be able to offer guidance, enough information has to be available. As Dr Nicolaidis says: "The difficulty these days is not diagnosing, but separating the findings. Some conditions we know are incompatible with life, but there are others in a grey zone where a lot of babies will die anyway and others will survive with handicaps. We held a meeting here in June when about 100 people from centres all round the world came to discuss ways of co-ordinating activities and pooling data to develop better methods of evaluation."

"We have never gone far enough. Taking the philosophical argument, the technology is with us. It's unrealistic to expect it to go away. The best thing we can do is to learn to use the technology in the best possible way."

©Times Newspapers Ltd 1986

BRIEFLY A round-up of news, views and information

Boon at bedtime

Once upon a time, parents could happily read Little Black Sambo and Noddy at bedtime — but mothers and fathers now face a bewildering and often unfamiliar array of children's literature. So just how do you choose books to build up a balanced library of fantasy and fact for little ones?

The Good Book Guide to Children's Books is compiled each year by a distinguished panel of writers that includes Doris Lessing and Michael Holroyd. They have whittled down the thousands of books published for children to a list of 600 recommended titles for toddlers to young teenagers, and ranging from fairy tales to encyclopaedias. Its "bookshop-by-post" service is a particular boon to household mothers. The guide is available at £4.50 (postage and packing included) from The Good Book Guide, 91 Great Russell Street, London WC1B 3PS.

Quote me...



"Critics will be keen to seize on my mistakes and say it's because I am a woman and don't know what I'm talking about. In time, they'll come round. Until then they'll say 'it's that bird getting it wrong again'."

Sally Jones, BBC Breakfast Time sportscaster

Share alike

First-timers who lost out in the TSB scramble can learn how the stock market works by joining a women's investment club. Members meet each month, invest small amounts and vote on which shares to buy and sell. For details contact Paula Azzel, 47 Hiltre Court, South Parade, West Kirby, Wirral, Merseyside L48 3JU.

Surrender

For just \$750, Californians can now enrol in a workshop to help them guiltlessly enjoy their vices. Run by glamorous blow-up guru Pat Donovan and entitled, "Do What You Love and Be Healthy", the course promises lessons on how to come to terms with your bad habits — even smoking. Heaven forbid it should catch on here...

Josephine Fairley

Winkfield Place Cordon Bleu Cookery Certificate and Diploma Courses. Learn to become a professional Cordon Bleu cook in beautiful surroundings with the best training available...

AUTUMN PROMOTION NOW ON. ORDER NOW FOR CHRISTMAS DELIVERY. TRADITIONAL UPHOLSTERY DIRECT FROM THE MAKER. MULTIYORK Handmade in Suffolk.

William, but only just. Richmal Crompton's scruffy schoolboy hero nearly met an untimely end. A new book explains why. Richmal Crompton: "likeable"

William Brown was born in February 1919, a dirty, scruffy, aggressive, perverse schoolboy — hardly the kind of stuff of which heroes are traditionally made. The fact that this 11-year-old walking disaster was to become one of literature's most popular and enduring characters says much for the secret anarchy which lurks within us all. Even William's creator, Richmal Crompton, regarded him as "that little savage" whom she had tried unsuccessfully to banish from her life. In reality, as in fiction, however, William refused to be dismissed, to the undoubted relief of many future generations of Just William fans. A churchgoing academic and lifelong spinster who described herself as "probably the last surviving example of the Victorian professional aunt", Crompton possessed a finely honed sense of the absurd which she utilized to the full in her William books. "She was immensely likeable — so likeable, indeed, that she is something of a biographer's nightmare," writes author Mary Cadogan, who nevertheless has succeeded in creating an endearing portrait of Crompton in her new book, Richmal Crompton, The Woman Behind William, published tomorrow (Altea & Unwin, £12.95p). In fact, the whole William saga came about almost by accident. The second of three children of a Lancaster clergyman-cum-schoolteacher, Crompton became a classical scholar and started writing seriously only after an attack of polio paralysed her right leg and put an end to her teaching career at the age of 33. William was born a few years before that but first emerged in all his grubby glory in the adult publication Home Magazine, before being transferred to the more family-orientated Happy Mag. William, however, did not catch the imagination of Crompton herself who, after only five episodes, decided that she had had enough of him. Her editor refused to allow her to discard her uncouth hero. Even so, she continued to regard William as a pot-boiler and it is ironic that, despite having written 41 adult novels, it is for her William books that Richmal Crompton is remembered. William's character was loosely based upon those of Crompton's younger brother, Jack, her sister's son, Tommy, and finally, upon her great nephew Edward Ashbee. None in real life, however, could have competed with William's outrageous scrapes. Says Mary Cadogan, who spent more than a year researching her biography: "What interested me so much about Richmal was her capacity to convey the essence of her terribly English environment so well and yet, at the same time, make one aware of the limitations of that society. She obviously wrote about all these things with great affection and yet there was this sense of being able to laugh at them at the same time." Cadogan was also fascinated by the lack of any romantic involvement in

FRIDAY Anorexia nervosa: how the slimmers' disease has been wrongly diagnosed

THE OAK ROOM LeMERIDIEN Piccadilly Introduces Michel Lorain France's Newest 3-Star Chef. Michel Lorain has recently been awarded three Michelin stars to add to his four Gault et Millau Red Toques, and Le Meridien Piccadilly are proud to announce he has been retained to recreate for The Oak Room restaurant his unique style of cuisine that delights his customers at his famous restaurant in the heart of France, La Côte Saint-Jacques at Juggu, Burgundy. The Oak Room is already enjoying a growing reputation through Chef David Chambers, and now with the two chefs working together it will achieve even greater gastronomic heights. They will be presenting original and highly inventive dishes like Gazpacho de Langoustine a la Crème de Courgettes, Les Ris de Veau au Citron Vert sur Endives Braisées and Soupe de Pêches Glacées et son Granité au Pûvre Vert, and of course wonderful French wines.

Malcolm Longair argues that as science becomes increasingly complex, scientists have a duty to explain themselves more simply and the public to take greater trouble to understand basics and new developments alike

Bring Einstein to the people

The gap between scientific practice and public understanding is widening. The general disillusionment with science and scientists contrasts strongly with the optimism of the postwar years when science was seen as the route to a better society and the "white heat of technological revolution" was more than a politician's catchphrase.

In world more and more dependent upon the fruits of scientific research, the public needs greater access to the essence of scientific knowledge and an understanding of what science can and cannot do. At its simplest level, a better understanding of scientific developments will help illumine a number of the crucial issues important for society at large, for example nuclear energy, the American Star Wars programme and the benign and malign use of lasers.

It is obvious that there must be a profound difference between the language of the professional scientist and the language used in the communication of the essence of scientific understanding to non-scientists. One does not have to understand the details of musical analysis to appreciate Beethoven's *Fidelio* or the techniques of painting to derive understanding and enlightenment from a painting of Titian. In the same way, there are scientific truths which transcend the technicalities by which they are understood by the professionals.

The crux of the problem of communication is one of developing a language of communication which is accessible to everyone but does not trivialise the subject or minimize the listener. This is the tight-rope which the language of communication must tread. I certainly have not solved the problem. I can recognize a brilliant solution when I hear someone like David Attenborough in *Life on Earth* or *The Living Planet*, but I believe that it is the responsibility of scientists to cultivate this language of communication. They need to do so because governments everywhere must be persuaded of the essential and growing role which pure research activity should play in the life of nations.

19th century — era of the private gentleman scientist

Until the mid-19th century scientific knowledge had been accessible to the general public. Although the technicalities were for the learned journals, the private gentleman scientist was an important and respected figure. Newton's three great laws of motion of the 1680s encapsulate in three brief statements how matter moves under the action of forces. Nowadays, these laws have a naturalness and intuitive appeal.

The first law says that the motion of any object does not change unless a force acts upon it; the second that the change in motion is just proportional to the force acting upon it, and the third that, to every action, there must be an equal and opposite reaction. All forces behave in this way. The miracle of astronautics in sending the Voyager II space probe from Earth to Jupiter, Saturn, Uranus and in 1989 to Neptune is simply the application of Newton's laws but used to quite amazing precision on the scale of the Solar System. In fact, Voyager II was only able to travel as far as Saturn and Uranus by using the accelerating force of gravity to pull it in the correct direction. Newton's laws apply in modified form to light rays as well.

Part of the accessibility of Newtonian science is that it forms

so much a part of everyday life. We find, as early as 1737, a splendid volume by Algarotti, one of the distinguished international intellectuals of the early 18th century, entitled *Newtonianismo per le dame* providing instruction for ladies in Newtonian optics. In Mozart's *Così fan tutte*, we find a magnetic remedy being adopted by Despina to revive the heavily disguised heroines. It is intriguing to note that in 1790, the date of the first performance of *Così*, Coulomb's law which describes the strength of the magnetic field from a magnetic body was less than 10 years old.

The great developments in electricity and magnetism took place over the succeeding 60 years. Yet Faraday, who first recognized that by moving the coils of a rotor through a magnetic field electric currents are induced in a circuit attached to the terminals, freely admitted that he could not understand the mathematics of Gauss, Neumann, Weber and Maxwell. None the less he held in a position of the highest scientific esteem.

It was in the middle of the 19th century that things began to get out of hand. The principal cause was the fact that more and more advanced mathematical tools were needed to describe physical phenomena. There developed a breed of scientists who no longer performed experiments. They thought of themselves not as mathematicians but rather as theoretical physicists. They have remained with us every since.

In the late 1860s James Clerk Maxwell worked out what the velocities of the atoms and molecules of a gas should be. By the mid-nineteenth century, the atomic or molecular hypothesis concerning the nature of matter was gaining ground. A gas was considered to consist of a very large number of atomic or molecular particles and one of the great challenges was to work out the typical velocities with which they moved.

Clausius showed that the basic gas laws could be understood if gases consist of atoms but, although he could work out the mean velocity of the particles, he could not work out the distribution of particle velocities. The velocity distribution discovered by Maxwell — appropriately known as the Maxwellian velocity distribution — was the answer. In a gas, heat is no more than the random velocities of the atoms of the gas but they do not all travel with the same speed.

The implication is profound. Until this time, physics was entirely deterministic. The laws of physics gave a definite answer to any well posed check problem. After Maxwell, one could no longer be certain if one chose a particle at random from the gas exactly what its velocity would be. You are allowed to state the probability with which you might find that velocity but not the actual velocity of any given particle. Maxwell was fully aware of the fact that this concept had a profound impact upon our understanding of thermodynamics. This breakthrough marks the beginning of statistical concepts in physics.

But the real problems begin with 20th century physics, and if one has to identify a year which marks the break with the 19th century, it has to be 1905, when Einstein wrote three of the greatest papers in the whole of physics at the age of 26.

At the time he was working as a technical expert third class" at the Swiss patent office in Bern. The first of these papers concerns the molecular nature of the fluids; the second is the great paper on the theory of special relativity and the third, the most revolutionary of the three, showed that light may be



considered to consist of particles as well as waves. It is the last two which give non-specialists the most trouble but, once their import is understood, the rest of the 20th century physics begins to fall into place.

The easier of the two is the special theory of relativity. The paper itself is a remarkable achievement of pure theoretical physics in that it sets out a purely theoretical problem and then solves it with a piece of analysis which is elegant and economical.

Normally, behind all theoretical advances, one can point to specific experimental results which required an explanation. In Einstein's case, the motivations were anomalies in the way in which light behaves when it is emitted from moving sources. According to classical physics, the velocity with which light waves travel should depend upon the motion of the observer or the source but this does not happen for light. It propagates at the same velocity of about 300,000 kilometres per second, no matter how the source or observer are moving.

It is this idea which Einstein formally introduced in his paper and showed that, if you assume the velocity of light must always be the same, however the source or observer moves, you find a unique set of transformations which tell you how to transform my space and time coordinates into that of a colleague moving at a constant velocity with respect to me.

The most fundamental of these new properties of what we must now call space time is that simultaneity is no longer an absolute property. Much of the difficulty of relativity disappears once the relativity of simultaneity is appreciated.

When a moving train is twice struck by lightning...

Let me give an example using one of Einstein's favourite trains. Suppose my colleague is sitting on the bank of a railway line and the train in which I am riding passes him by. I sit in the middle of the train. At the very moment when I pass him, I receive simultaneous light signals from the front and back of the train which tell me that

two lightning flashes hit the front and rear of the train.

How do I and my colleague interpret these events? I say that the lightning must have struck the two ends of the train at the same time. He says "Oh, no! I disagree. I agree that we both received the signal at the same time here but light moves at a finite speed and so the light signals must have set off from the front and back ends of the train at different times. When they were emitted, the train was further back along the track and so the back of the train must have been hit before the front".

This is what actually happens in nature. Two observers moving at constant relative velocities cannot agree about the simultaneity of events at separated points in space. When we move from the bank on to a train we slightly mix up bits of space-time in going from one state of motion to another.

There is a much more powerful argument which relates directly to things we can measure. A remarkable consequence of this new set of relations about how we measure space and time in different frames of reference is that there also arises a totally new relation between the mass of a body and its energy content — Einstein's famous formula $E = mc^2$. This states that we can associate an energy E with a certain amount of mass m and vice versa. This is wholly confirmed by atomic and nuclear explosions in which the energy release is associated with the mass difference between the initial and final products of the explosive material which is the nuclei of atoms.

How can we understand this relation from a simple perspective? There is a neat way of understanding why mass and energy are equivalent. It will be noted that the velocity of light acts as a limiting velocity. Light does not move faster than c if we emit it from a moving source but always has the value c .

Suppose we start accelerating a particle and keep on accelerating it until its velocity approaches the velocity of light. The energy of the particle is given simply by $\frac{1}{2}mv^2$ where m is the mass of the particle and v its velocity. We give the particle more energy as it accelerates but, eventually, when the velocity reaches values close to the velocity of light, something must go wrong.

What happens is that as we give the particle more energy the mass of the particle has to start increasing. Thus, by increasing its energy, we increase its mass. This demonstrates how the finite velocity of light leads to the equivalence of mass and energy.

It took much more effort to convince Einstein's contemporaries of quanta than of relativity. The wave theory of light had been extraordinarily successful in explaining all the phenomena of classical optics. Diffraction, interference and refraction all find a natural explanation in terms of the properties of waves. It is little wonder that Einstein's ideas were distinctly unwelcome to most of his contemporaries.

Why did he come to his different view? There remained a great mystery about the form of the spectrum of thermal radiation. This is the radiation spectrum of matter in thermal equilibrium with its surroundings.

Waves and particles: one of the greatest of recent discoveries

Einstein did something quite spectacular. He said, let us look at the difficult bit of the spectrum and see how it can be explained if we look at its statistical properties. He showed, again with great simplicity and elegance, that you could explain the form of the spectrum if you assumed the radiation is not made up of waves but of particles. Indeed, in a paper of 1909, he showed that the radiation behaves exactly like the particles of a Maxwellian gas when you ask what the fluctuations about the mean number of photons are expected to be.

Then, with a great coup de théâtre, he says — this explains entirely the photoelectric effect — the observation that electrons are ejected from metals when light falls upon their surface. We can picture a particle of light, a photon, coming in and ejecting the electron from the surface. Einstein was able to predict the energies of the electrons as the wavelength of light changed. Only in 1916 was this verified precisely.

Thus, waves behave like particles. Do particles behave like waves? Yes. In a classical experiment by Davison and Germer, it was shown that beams of electrons

interfere just like waves. This "wave-particle" duality is one of the great discoveries of the 20th century. A wholly new concept of physics was needed to accommodate it.

This is the point at which non-specialists begin to give up because many phenomena now turn up which have no counterpart in our normal experience. To observe these effects in the laboratory, highly specialized experiments are needed. This makes an essential point. Although the theory may be difficult, there exist many experiments which demonstrate that matter and radiation actually behave in these rather peculiar ways.

Let us give just a few simple examples of the way in which the new ideas work. First of all, let us look at quantisation. We are used to the idea that we can adjust the energy of a system to any value we like. When we deal with very small energy differences, however, this is no longer true. On the scale of the interior of atoms, all energies are not allowed. We say the energy levels are quantised. This is what produces the distinctive colours of, for example, street lights. We obtain a particular wavelength or colour when the electrons of sodium atoms jump from one allowed energy level to another producing the characteristic orange glow of street lights. On a fine enough scale, all matter and radiation are quantised. We do not see the fine structure in normal life because we take averages over enormous numbers of waves or particles.

The second important idea which comes out of the new quantum mechanics is the idea of quantum numbers. These are simply numbers which label the discrete quantised states of systems. Again this produces a number of surprises — it is not surprising now that energy is quantised but this applies to rotation as well. It is one of the distinctive and key features of the quantum world that angular momentum and rotational energy are quantised and, even more remarkable, that particles have an intrinsic spin or rotation even if they are in their lowest possible energy states.

This intrinsic rotation is very small, the typical amount of angular momentum for a particle being about \hbar . It turns out that all particles possess their own intrinsic spin and other properties as well — for example, their magnetic moments. It is as if every particle had its own little magnet associated with it and you cannot demagnetise it — it is intrinsic to the particle. The story of particle physics since the 1920s has been the search for new quantum numbers to explain the ever increasing amount of information about the fundamental building blocks of matter. You may well ask how this affects our everyday life. Let me give a few simple examples. You will recall we talked about the statistics of particle velocities in a gas. It is not surprising that when we look at the statistics on a fine scale, we have to take account of quantum effects.

We find that Maxwell's distribution is the classical limit of two different types of quantum statistics. It is remarkable that these properties are associated with the intrinsic spins of the particles. We do not need to go into the details of this but it is important to know what these different types of statistics are.

They are known as Bose-Einstein and Fermi-Dirac statistics, and the particles which obey these statistics are known as bosons and fermions. All particles in nature are either of one type or the other. Put in simple terms, the fermions can occupy only one single quantum state each and it is forbidden

to put more than one into that state. The bosons have the opposite tendency — if a boson is already in a quantum state, this increases the probability of another boson going into that state.

Let us give simple examples of how this works out. It is because electrons are fermions that you are only allowed to put one electron in each allowable state of the atom. The microchip is entirely dependent upon the fact that electrons are fermions.

The simplest example of the behaviour of bosons is in the laser. The enormous light intensities are obtained because the photons are bosons which tend to "hunt in packs". If the apparatus is designed to encourage the photons to cooperate, they will group together in bunches producing beams of extraordinary intensity of coherent light. From the 1930s to the present day, the number of "elementary" particles has multiplied. To create a new particle of mass m , we require an energy E such that $E = mc^2$, but there is more to it than this. All the particles have different quantum numbers and these have to be matched to conserve, not only energy and angular momentum, but all the other quantum numbers which particle physicists have had to invent to explain the families of particles and the way they behave.

Coming to terms with the make-up of the Universe

In the simplest case of electromagnetic forces, physicists nowadays think in terms of the particles which mediate the forces. In the case of electromagnetism the mediator is our old friend the photon. This is the particle which transmits the force to another charged particle. The other forces which hold protons, neutrons and nuclei together are known as the strong and weak forces and these are also mediated. Perhaps the most ambitious of all modern theories is the attempt by cosmologists and particle physicists to understand the origins of our Universe through a synthesis of the best current theories of particle physics and the understanding which astrophysicists have developed of the early evolution of our Universe. In these, the Universe itself is the laboratory for testing theories of elementary particles at the highest energies.

The idea is very simple in that the Universe cools as it expands. Therefore if we consider early enough epochs in the Universe, we can attain energies much higher than those yet accessible by other means. There is some hope that the ultimate unification of all the forces of nature may come about in the very early Universe at the extremely high temperatures which may be attained then. If this were to be correct, and, candidly, I believe it is more of a pious hope than a provable theory at the moment, this would represent the ultimate synthesis of the physics of the universe on the very smallest and very largest scales.

It would be folly to pretend that I have more than scraped the surface of the problem of communication of ideas in science. I have a vision of how it can be done but the execution is much more difficult than the concept. I am, however, thoroughly convinced of the importance of the development of the techniques whereby scientific thought and ideas become the currency, if not of common conversation, at least of the educated lay person.

The author is Astronomer Royal for Scotland. This article is extracted from his *Brianca Award lecture in Edinburgh last night*.

Tales out of school

Sometimes it is worth investigating our politicians' wilder claims. Last month Shirley Williams, president of the SDP, gave a speech to the Politics Association in which she claimed that "on two occasions recently" invitations to speak at named schools on a non-party political topic were "withdawn after direct intervention by Labour chairmen of governors". Recently? Alleyn's School in Stevenage confirms the incident but says it happened "two or three years ago". Withdrawn? Well, not for long. And Colin Greenhalgh, head of Hills Road Sixth Form College, Cambridge, has since sent a new invitation: he says the chief education officer and governors had felt it would be fairer, pre-emption, to invite representatives of the other parties as well. "I have been waiting for two weeks to hear from her office whether she is still available," he says.

Company orders

A group of company executives planning to go on an SAS adventure weekend have had to cancel because their managing director does not approve. The group, from 3M in Bracknell, intended to pay about £350 each for the privilege of running around the grounds of a stately home fighting mock guerrilla battles with ex-SAS men. As well as helicopters, pyrotechnics and "spit" guns (which cover victims in blood-coloured dye) the fee also includes a lunch of rabbit and chicken roasted in a hole in the ground, two nights in a hotel and champagne. The supposed aim: to

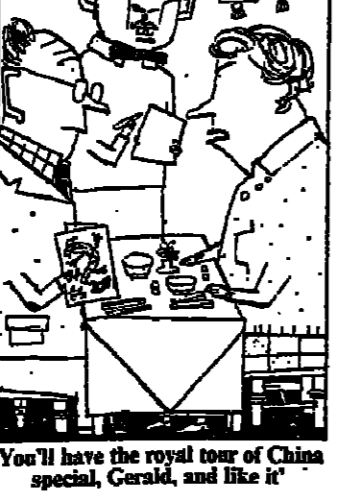
THE TIMES DIARY

encourage team work. But new 3M boss Ronald Baulko disagreed and suggested they scrapped the idea. His office tells me: "Our values are not ones of conflict and antagonism, but of co-operation and mutual benefit."

Hit for six

Mrs Thatcher may soon find herself sitting out of bed the wrong side on Saturday mornings too. Daily she furms at slights, real or imagined, dealt her by presenters of Radio Four's *Today* pro-

BARRY FANTONI



"You'll have the royal tour of China special, Gerald, and like it"

gramme. Now a Saturday edition is being plotted for the New Year, probably to run between 7 and 9 am. *Saturday Today*, presented for a number of years by Michael Aspel and featuring a barely comprehensible rustic who offered gardening advice, was put out of its misery in the mid-1970s. Plans last year to revive it fell on the hurdle of negotiating rates with the unions. The Beeb said yesterday it had "firm hopes" of better luck this time.

Fraternal

Bernard Kalb, the State Department spokesman who resigned in protest at the US government's Libyan disinformation campaign, once took a more relaxed view of terminological inexactitudes. In his earlier role as diplomatic correspondent, he wrote a best-selling — and adulatory — biography of Henry Kissinger with his brother Marvin. In their joint introduction, they wrote: "Any errors that may be found in this book are the fault of my brother".

Man of letters

A new twist to the furor surrounding this year's Booker Prize. The chairman of the judges, poet and critic Anthony Thwaite, has been castigated by fellow panellists for writing a private letter of condolence to his unshorlisted pal Julian Barnes. The funny thing is, I now learn, that Thwaite did not in fact vote for the novel himself. Still, the Thwaites are compulsive letter-writers. I gather that his wife, Ann, sent a gushing three-pager to Paul Bailey, whose *Gabriel's Lament* did make the final six.

Neither President Reagan nor Mr Gorbachov blinked at Reykjavik. Neither surrendered any part of what they see as their vital national interest. George Shultz, however, had been blinking ever since the arrest in Moscow of the American journalist Nicholas Daniloff. It is Shultz who was outmanoeuvred by Eduard Shevardnadze, the Soviet foreign minister, not Reagan by Gorbachov.

Usually, the State Department was in almost complete control of negotiations with the Soviet Union from the moment Daniloff was arrested to Shultz's final, gloomy press conference in Reykjavik. This may not have been an accident. Soviet leaders know that Shultz has a strong desire to keep other top American officials out of foreign policy making, is very unenthusiastic about Star Wars, has a dangerous yearning to make agreements. Sending Shevardnadze to New York to negotiate over Daniloff, a surprise to the West at the time, can now be seen to have been an inspired move by the Soviet leadership. It ensured that Shultz was promoted willy-nilly to first position among President Reagan's advisers because he was the only senior US official to whom the Soviet Union was talking.

Many of Reagan's supporters, both in America and in Europe, wondered why he agreed to the Daniloff, Zakharov, Orlov exchange. By it, the Americans ceded an important principle and lost the international initiative. The only explanation, clear now that Reykjavik is over, is that the President had accepted advice, presumably from Shultz, that Gorbachov badly wanted an arms control deal. So badly that he could be relied on to agree to a

David Hart

Reagan really the winner

reduction in intermediate range missiles, at the least, without insisting that the Americans give up SDI development and testing in return. Such advice demonstrates a frightening failure of perception. It is true that Gorbachov suggested in France, after the Geneva summit, that he might not insist that an agreement on intermediate missiles be linked to an agreement on SDI. But that was a year ago. Since then, there have been increasing signs that Gorbachov's domestic position is not as strong as had been assumed. The arrest of Daniloff was seen by many administration officials as, at best, a blunder by Gorbachov, at worst, undertaken without his knowledge or consent.

Even if Shultz cannot be entirely blamed for failing to anticipate the scope and depth of Gorbachov's arms control offers at Reykjavik, he can certainly be severely criticized for failing to warn the President that any arms control agreement not linked to an agreement on SDI was going to be very difficult to achieve. The Soviet offer, last night, not to link SDI to an agreement on INF could have been made at Reykjavik. That it was not, demonstrates that their desire to trap President Reagan was greater than their desire for genuine arms control. Shultz's failure to appreciate

this stems from his reluctance to take SDI seriously — an approach clearly not shared by the Soviet leadership.

Admiral Poindexter, President Reagan's unimpaired national security adviser, said after Reykjavik: "We failed to see that a defensive system against ballistic missiles could possibly constitute a threat. We don't understand what the Soviets fear in a defensive system." It is this self-confessed failure by the Admiral, a failure shared by Shultz, that led to the Reykjavik fiasco. Soviet fear of SDI is based on two perceptions. First, that it is only their military forces that confer first-world status on them. Second, knowing better than most that SDI research has been much more successful than even its most whole-hearted supporters hoped, they see their bargaining chips, their ballistic missiles, losing value every day. This provides some explanation for Gorbachov's offer of substantial cuts in these missiles.

The Soviet Union fears that its world status and influence will decline in perpetuity if SDI is eventually deployed. Even if the Soviet Union succeeds in deploying a defensive system of its own, it will not restore its lost status. For the terms of the competition between East and West will have decisively shifted in favour of the

West: away from competition in building missiles towards competition in building economies; away from competition in war-head guidance technology towards competition in information technology.

If this does happen, the Soviet leadership will find it increasingly hard to divert domestic attention away from its failure to secure for its people a standard of material prosperity approaching that of the West. American and European commentators are saying that Reagan has been put on the defensive by Reykjavik. They say he has been forced to explain why he turned down Gorbachov's apparently generous arms control offers. It has become a too-common mistake to under-estimate Mr Reagan. On his return from Reykjavik he told them that it was his judgment that SDI research, testing and development should be continued as an insurance against Soviet bad faith, so frequently demonstrated over existing arms control agreements. The American people will accept their President's judgment on this issue as they have on so many others.

In time, Reykjavik may well come to be seen as a great Reagan success. Gorbachov has made many untractable concessions demonstrating, unequivocally, his need for an agreement. By his absolute refusal to countenance any serious restrictions on SDI Reagan may well have rendered it an acceptable as well as a permanent feature of the strategic landscape as the benefits of a transfer from offensive to defensive strategic deterrents sink in. SDI is, after all, an attempt to achieve exactly what all those who genuinely seek peace most earnestly desire. Arms control.

PROPERTY BUYERS' GUIDE LONDON PROPERTIES

35 Cranley Gardens SW7 NEW DEVELOPMENT An exceptional new conversion of luxury self-contained flats under the direction of Flaxman Properties Ltd.

MORTGAGE or REMORTGAGE THE A.M.G. FREE SOLICITOR'S COSTS (Conveyancing) by an established firm of W.I. solicitors (except stamp duty and the usual Registrar and Search fees)

The safe route to timeshare holidays

In the second article of a two-part series, CHRISTOPHER WARMAN, Property Correspondent, looks at the positive side of a troubled trade

Timesharing, now 10 years old in Britain, is a clever and successful concept for a holiday, providing the purchaser with a week or weeks in a resort for a number of years or in perpetuity. It has grown quickly to a point where there are now 60,000 British owners, nearly 40 resorts in Britain and 1,500 world-wide.



In the north: Highland lodges on the Loch Rannoch estate, Perthshire

The European Holiday Timeshare Association, which has taken some members from this association because of doubts about the stringency of its requirements for membership, emphasizes its role as a consumer protection organization. The Timeshare Developers Group was formed this summer among six of the biggest UK developers accounting for 35 per cent of the British timeshare market here and abroad.

AYLESFORD HILL STREET, MAYFAIR W1 A magnificent period residence, largely unaltered since the 18th Century. The reception rooms and principal bedroom suites are of classic proportions with high ceilings, large windows and extensive panelling.

37 SLOANE GARDENS SW1 Two show flats are now offered for sale: A stunning one-bedroom flat on the first floor, with a magnificent 20ft reception room.

MILLBROOKE MORTGAGE + INVESTMENT SERVICES 235 Upper Richmond Rd, Putney, London SW15 2SN 01-788 7775 (24 hours)

MUST SELL BARGAIN CHELSEA Stunning interior designed newly refurbished in Oakley St. We are prepared to sell well below market value.



In the south: stone lodges at the St Mellion timeshare village, Cornwall

MORTGAGE & FINANCIAL ADVICE Immediate and Impartial MORTGAGES - 100% advanced up to £120,000

NEED A MORTGAGE? LOOK NO FURTHER! MORTGAGES FROM 10% (10.4% APR) REMORTGAGES FOR ANY REASON

International television for the international businessman in London. Chelsea Cloisters Sloane Avenue, London SW3

CEDAR CLOSE DULWICH SEZI Complete comfort and security in Retirement. A secluded development of retirement flats finished to a very high standard.

Robson Limited 01-623 3495 ST. JAMES W1 5th floor studio apartment in sought after position. Fitzrovia, Bedford, Long lease, £77,500.

NATHAN WILSON & CO 64 ROSSLYN HILL, LONDON NW3 1ND HIGHGATE, N6 Super second floor flat in modern block offering two bedrooms, large lounge/dining area.

WHY NOT RE-MORTGAGE YOUR PROPERTY And get the benefit of your equity - Installing Central Heating - Refurbishing of your property

The Businessman's home from home. Luxurious Apartments for the international businessman in this famous London building

HOWARD MINTER SLOANE SQ, SW1 WHY BUY? WHEN YOU CAN RENT UNFURNISHED IN THIS QUALITY BUILDING.

STRUTT & PARKER EAST SUSSEX - NR. LEWES A spacious Victorian mansion with extensive accommodation on four floors, ideally suited to restoring home, office, restaurant or other institutional use.

HOUSE HUNTING! CONVEYANCING £145! (plus VAT and disbursements) WHATEVER THE PRICE OF THE HOUSE or any residential sale or purchase.

Grant & Partners Docklands Residential Department E14 2 bed house on new development £269,950 SE16 Reverley Lock, 3 bed house *early viewing recommended* £289,950

BENSONS ESTATE AGENTS/VALUERS 106 Hendry Road, Westchester, London SW1P 2ZF Telephone: 01-222 7828

SOUTH KENSINGTON SUPERB NEW CONVERSION 2 and 3 bedroom flats for sale with excellent fitted kitchens, bathrooms, fully carpeted and new crown panels.

DEVON Exeter 5 miles, M5 Motorway 4 miles An imposing Grade II listed former factory situated in a delightful position on the edge of a charming village.

LUXURY PROPERTY REDUCED FOR IMMEDIATE SALE Four bedrooms. Three bathrooms. Large dining room. Even larger sitting room. Kitchens/breakfast room with cooker, separate oven and grill.

CONNAUGHT PLACE, W2. Two outstanding apartments to be sold. OVERLOOKING HYDE PARK - one of the finest apartments available in Europe, with eight bedrooms, seven en-suite bathrooms and five reception rooms.

Grant & Partners Docklands Residential Department Flats & Houses Wanted NOW! Sale Fees 1% (plus VAT) for all instructions taken in October 1986

SUDBROOKE LODGE LONDON SW An exceptional and well proportioned detached family house locally much admired. Approached via driveway with off street parking and set in a large and mature garden of about 2/3rds of an acre.

SUFFOLK Ipswich 7 miles An imposing Grade II listed former manor house dating from 16th century. In need of restoration and refurbishment

DOCKLANDS PROPERTY CENTRE HOUSES AND FLATS THROUGHOUT THE DOCKLANDS AREA RESIDENTIAL DEPARTMENT TEL: 01-790 9560

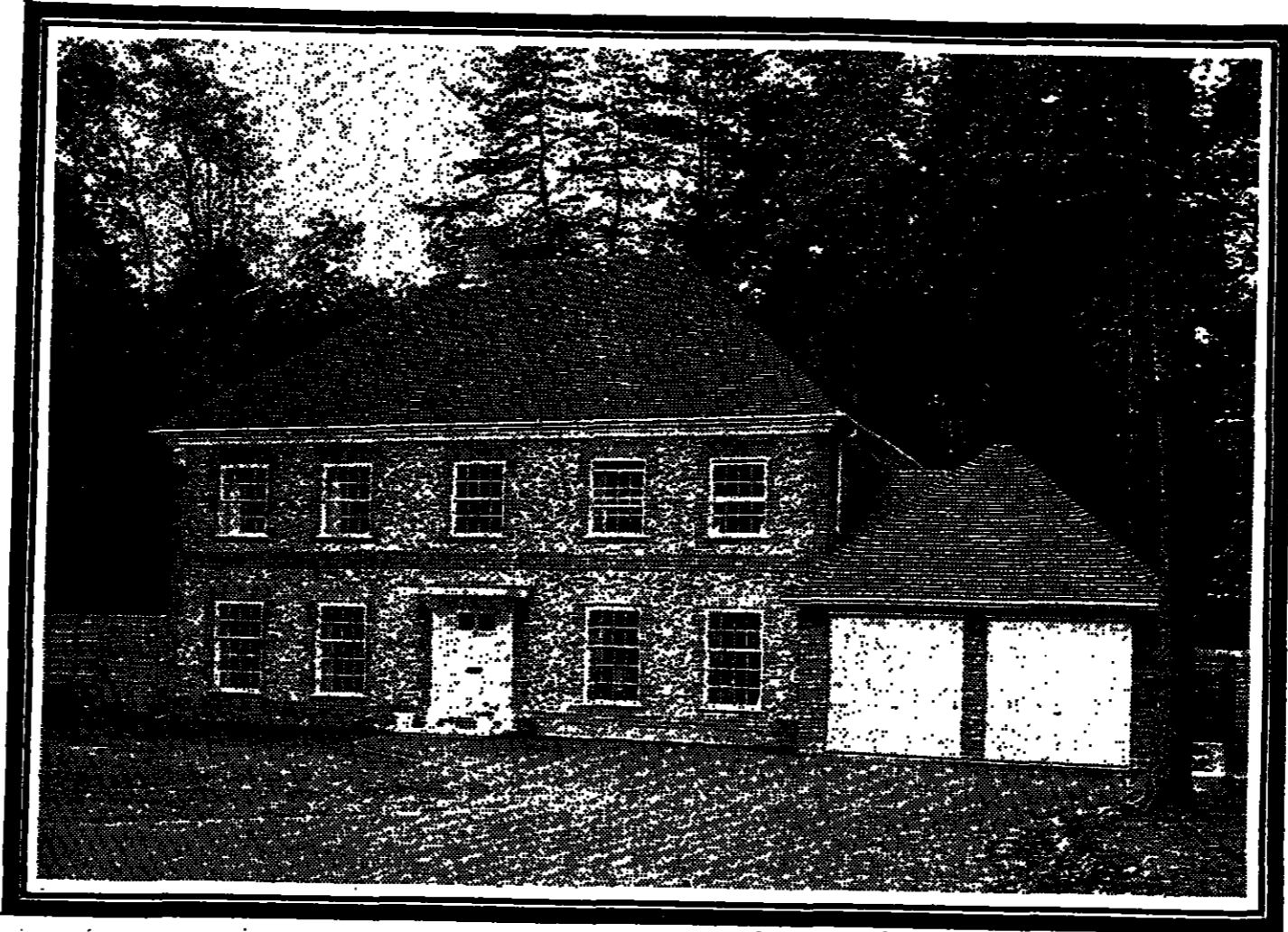
Kenwood 01-223 2232 01-223 2232 01-223 2232 OPEN Mon-Fri 9.30am-5.00pm Sat Sun 11am-2pm

WATERLOO GARDENS MILNER SQUARE N1 A superb penthouse set in a prestigious and successful luxury development in immaculate order, offering tranquility and security.

PROPERTY BUYERS' GUIDE
COUNTRY PROPERTIES



CHARLES CHURCH
QUALITY HOMES OF CHARACTER



CATERHAM
SURREY
£183,000 TO £188,000
(0883) 42369
(2 only)

WALTON ON-THE-HILL
SURREY
FROM £298,000
(073781) 3671
(4 only)

NORTH OXFORD
OXFORDSHIRE
£170,000 TO £240,000
(0865) 54243

HOOK
HAMPSHIRE
£64,500 TO £140,000
(025672) 4145

MONKTON HOUSE
CHIPPENHAM
WILTSHIRE
A development of 8 luxury flats and five houses based on the conversion of this Georgian Manor (listed grade II) set in its own parkland...

SUFFOLK
16 miles South of Cambridge
10 bedrooms, 10 bathrooms, 10 reception rooms...

COLEFORD
10 miles South of Cambridge
14 rooms, many original features, garage and separate workshop...

ISLE OF WIGHT
Pretty Georgian town with water frontage to Woolton Creek
14 rooms, 3 bathrooms, 2 reception rooms...

WOODBOROUGH
HALL
NOTTINGHAM
17th Century country house in 3 acres of mature garden...

5 MILES
BUDCOT STATION
Superb Barn conversion & 0.4 acre site of outbuildings in 1.4 acres...

STANTON
ADJOINING MANOR HOUSE
Interest in central conservation area of University town...

Hampton & Sons
GLOUCESTERSHIRE, NEAR STOW-ON-THE-WOLD
A superb house and country estate, built in the style of a 17th century manor...

SMITH WOOLLEY
27/28 Bridge Street, Cambridge CB2 3SU
Tel: (0223) 3228

HANTS, DORSET, &
LOW.
BOURNEMOUTH
Large luxury apartment situated in grounds of Bournemouth Palace...

HEREFORDSHIRE,
WORCS, & SHROPS.
HEREFORDSHIRE
3/4 acre, 2 bedrooms, 2 bathrooms, 2 reception rooms...

MIDDLESEX
SHEPPERTON
3 storey character house in prime village location...

5 WARWICKSHIRE
Delightful stone & shingle property in charming hamlet...

SOMERSET & AVON
BATH
Grade II listed Georgian house...

SNARESBROOK
E11
Overlooking Lake
Beautifully restored period manor house...

EAST ANGLIA
RAMSEY
16th Century Manor House...

EAST OF ENGLAND
LINCOLN
16th Century Manor House...

GLOUCESTERSHIRE
WITTINGHAM VILLAGE
16th Century Manor House...

KENT
MR. DOVER
16th Century Manor House...

STRATFORD
Georgian country house...

CHESHIRE
BROADS
16th Century Manor House...

SOMERSET
Large bungalow...

DREWETT'S
CHEVELEY
NEAR LAMBOURN
17th Century Manor House...

LAVENHAM
16th Century Manor House...

GLOUCESTERSHIRE
WITTINGHAM VILLAGE
16th Century Manor House...

KENT
MR. DOVER
16th Century Manor House...

STRATFORD
Georgian country house...

CHESHIRE
BROADS
16th Century Manor House...

SOMERSET
Large bungalow...

SOMERSET
Large bungalow...

PROPERTY & RENTALS
APPEAR ON PAGES
38 & 39



COURT AND SOCIAL

COURT CIRCULAR

BUCKINGHAM PALACE October 14: His Excellency Dr Marcello Marten was received in audience by the Prince of Wales and the Princess Anne...

KENSINGTON PALACE October 14: The Prince of Wales, Colonel-in-Chief, The Parachute Regiment, this morning at Kensington Palace received Lieutenant-Colonel Michael Jackson...

Meeting English-Speaking Union The Archbishop of Canterbury gave the opening address at a conference arranged by the International Peace Academy...

Marriage Mr R.H. Del Mar and Mrs E.B. McLaren The marriage took place on Saturday October 11, 1986, in Bishop's Waltham, Hampshire...

Christening The Princess of Wales is one of the sponsors for the infant daughter of Mr and Mrs James Lonsdale who was christened Leonora Diana Fiona...

Halley memorial A memorial to Edmond Halley will be unveiled in the cloisters of Westminster Abbey during a special service on Thursday, November 13, 1986...

Service reception The Queen's Regiment Admiral of the Fleet Sir John Fieldhouse, Chief of the Defence Staff, was the guest of honour at a reception given by the Queen's Regiment...

Appointments Latest appointments include: Lord Justice Bingham to be a Privy Counsellor on his appointment as a Lord Justice of Appeal...

Knighthoods for judges Knighthoods have been conferred on Mr Justice Potts, Mr Justice Roush and Mr Justice Ian Kennedy on their appointment as Justices of the High Court...

Sale room

Meagre demand for inro and netsuke

By Geraldine Norman, Sale Room Correspondent

Christie's tried to sell the collection of Japanese inro and netsuke belonging to a Belgian businessman yesterday with only limited success...

Sotheby's have now transferred their mixed property sales of oak furniture to Billingshurst, their Sussex saleroom...

Meeting

English-Speaking Union The Archbishop of Canterbury gave the opening address at a conference arranged by the International Peace Academy...

Marriage

Mr R.H. Del Mar and Mrs E.B. McLaren The marriage took place on Saturday October 11, 1986, in Bishop's Waltham, Hampshire...

Christening

The Princess of Wales is one of the sponsors for the infant daughter of Mr and Mrs James Lonsdale who was christened Leonora Diana Fiona...

Halley memorial

A memorial to Edmond Halley will be unveiled in the cloisters of Westminster Abbey during a special service on Thursday, November 13, 1986...



Mrs Barbara Woodhouse, the television personality, who suffered a stroke two years ago, yesterday helped to launch an appeal for dog owners to contribute towards the National Stroke Campaign...

Forthcoming marriages

Mr D.G.C. Thomson and Miss A.M. Maccoby The engagement is announced between David, son of Professor Thomson...

Mr A.R.G.L. Keodall and Miss N.L. Bensburg The engagement is announced between Angus, only son of Mr and Mrs George Langton Keodall...

Mr C.D. Armitage and Miss E.A. Bloomer The engagement is announced between Charles, younger son of Captain and Mrs David Armitage...

Mr A.P. Connor and Miss S.J. Hobbs The engagement is announced between Adrian Paul, only son of Mr and Mrs B. Connor...

Mr R.A. Mackey and Miss S.L. Spink The engagement is announced between Richard Anthony, son of Mr and Mrs Joseph Mackey...

Mr J.R. Fausser-Baker and Miss C.J. Sloan The engagement is announced between John Richard, son of the late Mr Hugo Fausser-Baker...

OBITUARY

PROFESSOR JOHN CLUTTON-BROCK

Improving safety of anaesthesia

Professor John Clutton-Brock, anaesthetist, who did valuable work to make anaesthesia safer for the patient, died on October 13. He was 73.

DR KENNETH LAMBERT

Dr Kenneth Lambert, analytical psychologist and author, who made important contributions to the contemporary reassessment of Jung's theories, died on October 5. He was 76.

PROFESSOR CECIL TODD

Professor Cecil Todd, who died on October 4 at the age of 74, was an artist who spent much of his career on the African continent...

MOST REV JOHN McEENEY

The Most Rev John J. McEneaney, SJ, Roman Catholic Archbishop of the Diocese of Kingston, Jamaica, from 1967 until 1970, died on October 5. He was 90.

COL CHARLES FITZGERALD

Colonel Charles G. FitzGerald, who died at Arlington, Virginia, on October 5, aged 68, played an influential behind-the-scenes role as an American specialist on Soviet affairs...

a profoundly inquisitive nature. His particular interest in the functions of the brain made him one of the early clinical experts in electroencephalography...

He devoted much of his research to safety in anaesthesia and to finding that delicate balance between light anaesthesia and the avoidance of awareness in the patient...

He was twice married, first to Barbara Kirkby Mason, a pianist and music teacher, with whom he had two sons. This marriage was dissolved, and he married, second, Daphne Donnington...

His major achievement was increasing the number of indigenous clergy for the diocese's 80,000 Catholics. He was also a close friend of Sir Alexander Bustamante, Jamaica's first prime minister following independence in 1962.

From 1964 to 1967, he was army attaché in Moscow, and from 1969 to 1973, a Defence Department adviser to the SALT delegation.

BACK SUFFERERS! The relief you've been waiting for. AS SEEN ON T.V. WRONG: a sagging bed can aggravate back pain. RIGHT: the OBAS bed gives correct support...

BACK SUFFERERS! The relief you've been waiting for. Years of experience. We are the experts. All our beds are made by craftsmen and are in appearance just like top quality 'standard' beds...

Science report Fresh optimism over whale numbers. By Tony Samstag. A study of blue and humpback whales indicates that they have increased their population to the point where they may well be out of danger of extinction...

BIRTHS, MARRIAGES, DEATHS AND IN MEMORIAM

BIRTHS: ATKINSON - On October 12th at Ipswich... BIRNBY-DAWSON - On October 13th at Ipswich... CAMPBELL - On October 12th at Ipswich... CURRY - On October 12th at Ipswich... DAWSON - On October 12th at Ipswich... DUNN - On October 12th at Ipswich... HARRIS - On October 12th at Ipswich... MARRIAGES: WASHROCK-PAGE - On September 27th 1986, at Lynton, Devon...

DEATHS: BARNETT - On 10th October, suddenly at home... BURTON - On 10th October, suddenly at home... CAMPBELL - On the 9th October 1986... COOPER - On 10th October, suddenly at home... DUNN - On 10th October, suddenly at home... HARRIS - On 10th October, suddenly at home... MARRIAGES: WASHROCK-PAGE - On September 27th 1986, at Lynton, Devon...

ANNOUNCEMENTS: PATRICK LEIGH FERMO - Will be signing copies of his second volume of classic travel... 'BETWEEN THE WOODS AND THE WATER'... THE NEW ADVENTURES OF THE BISTO KIDS... SERVICES: FRIENDSHIP - Love or Marriage... MEMORIAL SERVICE: A Memorial Service for Robert Danby Bradford...

ANNOUNCEMENTS: PATRICK LEIGH FERMO - Will be signing copies of his second volume of classic travel... 'BETWEEN THE WOODS AND THE WATER'...

FOR SALE: SAY IT WITH MUSIC - SAY IT WITH MARKSONS and choose from hundreds of vinyl and CD... MARKSON PIANOS... ANTIQUES & COLLECTABLES - CASH IN ON HIGH PRICES - GANCE - JEWELLERY TO SELL

ANNOUNCEMENTS: 25 Year Anniversary Appeal BLOND MCINDOE CENTRE - Your support is vital to the continuing research into the problems of rejection of transplants of liver, kidney, heart, and skin...

ANNOUNCEMENTS: AMERICAN BUYERS SEEK - Antique and Modern Furniture... WANTED - SPINK Buy War Medals...

ANNOUNCEMENTS: MEMORIAL SERVICE: A Memorial Service for Robert Danby Bradford... MEMORIAL SERVICE: A Memorial Service for Miss Phoebe COOPER...

ANNOUNCEMENTS: MEMORIAL SERVICE: A Memorial Service for Robert Danby Bradford... MEMORIAL SERVICE: A Memorial Service for Miss Phoebe COOPER...

ANNOUNCEMENTS: MEMORIAL SERVICE: A Memorial Service for Robert Danby Bradford... MEMORIAL SERVICE: A Memorial Service for Miss Phoebe COOPER...

ANNOUNCEMENTS: MEMORIAL SERVICE: A Memorial Service for Robert Danby Bradford... MEMORIAL SERVICE: A Memorial Service for Miss Phoebe COOPER...

ANNOUNCEMENTS: MEMORIAL SERVICE: A Memorial Service for Robert Danby Bradford... MEMORIAL SERVICE: A Memorial Service for Miss Phoebe COOPER...

FLATSHARE: BATTERSEA/CLAPHAM - Prof. get in share house... FLATSHARE: BATTERSEA - Female flat for sale... FLATSHARE: HAMPTON HILL - Prof. Male...

FLATSHARE: BATTERSEA - Female flat for sale... FLATSHARE: HAMPTON HILL - Prof. Male... FLATSHARE: BATTERSEA - Female flat for sale...

FLATSHARE: BATTERSEA - Female flat for sale... FLATSHARE: HAMPTON HILL - Prof. Male... FLATSHARE: BATTERSEA - Female flat for sale...

FLATSHARE: BATTERSEA - Female flat for sale... FLATSHARE: HAMPTON HILL - Prof. Male... FLATSHARE: BATTERSEA - Female flat for sale...

FLATSHARE: BATTERSEA - Female flat for sale... FLATSHARE: HAMPTON HILL - Prof. Male... FLATSHARE: BATTERSEA - Female flat for sale...

FLATSHARE: BATTERSEA - Female flat for sale... FLATSHARE: HAMPTON HILL - Prof. Male... FLATSHARE: BATTERSEA - Female flat for sale...

FLATSHARE: BATTERSEA - Female flat for sale... FLATSHARE: HAMPTON HILL - Prof. Male... FLATSHARE: BATTERSEA - Female flat for sale...

FLATSHARE: BATTERSEA - Female flat for sale... FLATSHARE: HAMPTON HILL - Prof. Male... FLATSHARE: BATTERSEA - Female flat for sale...

FLATSHARE: BATTERSEA - Female flat for sale... FLATSHARE: HAMPTON HILL - Prof. Male... FLATSHARE: BATTERSEA - Female flat for sale...

OVERSEAS TRAVEL: LOWEST FARES: Paris, Frankfurt, Rome... FLIGHT SAVERS: ATHENS, FARGO, FRANKFURT... IT'S ALL AT TRAILFINDER

OVERSEAS TRAVEL: LOWEST FARES: Paris, Frankfurt, Rome... FLIGHT SAVERS: ATHENS, FARGO, FRANKFURT... IT'S ALL AT TRAILFINDER

OVERSEAS TRAVEL: LOWEST FARES: Paris, Frankfurt, Rome... FLIGHT SAVERS: ATHENS, FARGO, FRANKFURT... IT'S ALL AT TRAILFINDER

OVERSEAS TRAVEL: LOWEST FARES: Paris, Frankfurt, Rome... FLIGHT SAVERS: ATHENS, FARGO, FRANKFURT... IT'S ALL AT TRAILFINDER

OVERSEAS TRAVEL: LOWEST FARES: Paris, Frankfurt, Rome... FLIGHT SAVERS: ATHENS, FARGO, FRANKFURT... IT'S ALL AT TRAILFINDER

OVERSEAS TRAVEL: LOWEST FARES: Paris, Frankfurt, Rome... FLIGHT SAVERS: ATHENS, FARGO, FRANKFURT... IT'S ALL AT TRAILFINDER

OVERSEAS TRAVEL: LOWEST FARES: Paris, Frankfurt, Rome... FLIGHT SAVERS: ATHENS, FARGO, FRANKFURT... IT'S ALL AT TRAILFINDER

OVERSEAS TRAVEL: LOWEST FARES: Paris, Frankfurt, Rome... FLIGHT SAVERS: ATHENS, FARGO, FRANKFURT... IT'S ALL AT TRAILFINDER

OVERSEAS TRAVEL: LOWEST FARES: Paris, Frankfurt, Rome... FLIGHT SAVERS: ATHENS, FARGO, FRANKFURT... IT'S ALL AT TRAILFINDER

SELF-CATERING PORTUGAL: ALCAREVA - Lina Vilas with pools... SELF-CATERING SPAIN: ALCAREVA - Lina Vilas with pools... WINTER SPORTS: LE SKI - BEST VALUE IN COACHING

SELF-CATERING PORTUGAL: ALCAREVA - Lina Vilas with pools... SELF-CATERING SPAIN: ALCAREVA - Lina Vilas with pools... WINTER SPORTS: LE SKI - BEST VALUE IN COACHING

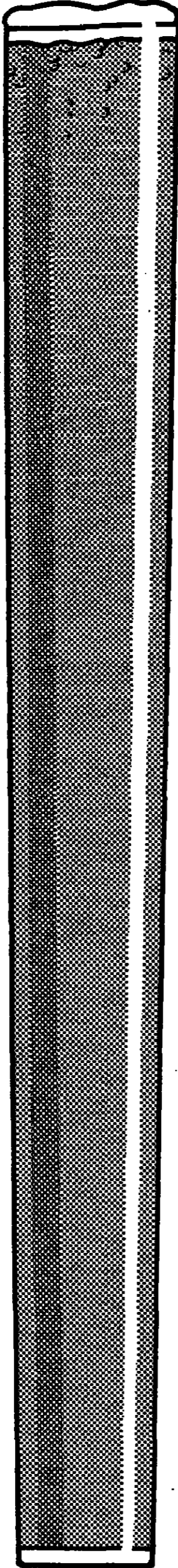
SELF-CATERING PORTUGAL: ALCAREVA - Lina Vilas with pools... SELF-CATERING SPAIN: ALCAREVA - Lina Vilas with pools... WINTER SPORTS: LE SKI - BEST VALUE IN COACHING

SELF-CATERING PORTUGAL: ALCAREVA - Lina Vilas with pools... SELF-CATERING SPAIN: ALCAREVA - Lina Vilas with pools... WINTER SPORTS: LE SKI - BEST VALUE IN COACHING

To Place Your Classified Advertisement - Please telephone the appropriate number listed below between 9 a.m and 6 p.m. Monday to Friday...

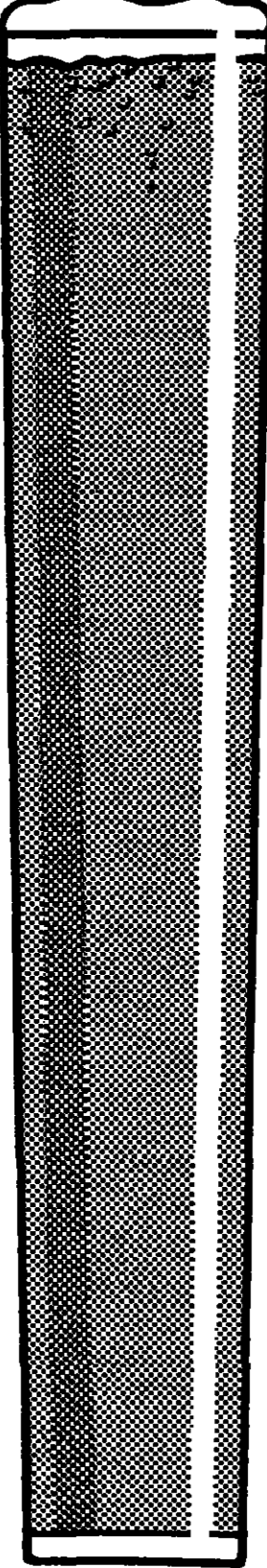
BASS

Bass PLC
Turnover in year ending
30 September 1985 £2,410,000,000
Source: Annual Report 9/12/85



WHITTBREAD

Whitbread and Company PLC
Turnover in year ending
3 March 1986 £1,533,000,000
Source: Annual Report 5/9/86



WHICH BREWER OFFERS THE PRIVATE INVESTOR MORE THAN THE USUAL?

Advertisement for AFCOR Investments Limited, featuring a coupon and contact information for private investors.

Pilkington to buy Swedlow

Los Angeles (Reuters) - Swedlow, the Californian company which makes parts for high-performance aircraft, has pulled out of an agreement to merge with PPG Industries of Pittsburgh.
The company will instead join forces with the British glass manufacturer, Pilkington.
Swedlow said it had ended the agreement to be bought by PPG Industries and agreed to an offer by Pilkington Holdings Inc.
The PPG agreement, which was reached in August last year, called for a sale price of \$32.60 a share. But the transaction was delayed by the Federal Trade Commission, which challenged it on anti-trust grounds, Swedlow said.
The company said that the terms of the Pilkington offer were essentially the same as those contained in the PPG agreement and provided additionally for a share price of \$33.40 if the merger were completed on or after January 1 of next year.
Swedlow shareholders holding about 49 per cent of the company's shares, are expected to agree to sell to Pilkington at the same price.
They also plan to give the buyer a proxy to vote those shares when the proposed transaction is submitted to shareholders, the company said.
Swedlow's board is to meet today to consider the offer, a spokesman for the company said.

Bahrain plans full stock exchange to boost its economy

Bahrain (Reuters) - Bahrain's Cabinet is expected to give the go-ahead by the end of December for the Gulf state's first full stock exchange, to enhance its status as a leading regional financial centre, a government adviser said.
Mr Fawzi Behzad, stock exchange adviser to the Commerce and Agriculture Ministry, said a trading floor for the exchange would be opened after new legislation had been sanctioned.
"We are awaiting the decision of the Ministerial Legal Committee... We expect this before the end of 1986," he said.
Bankers see plans to set up a stock exchange as an integral part of the Cabinet's package, unveiled in August, to stimulate the domestic economy.
Bahrain - although a minor oil producer - has been hit like other Gulf states by falling oil prices and a regional economic downturn.
Some international banks, which helped to make Bahrain a regional financial centre during the oil-boom days of the 1970s and 1980s, have been reducing staff because accumulated bad loans are proving a severe drag on profits.
The new exchange is expected to boost Bahrain's economy. It could attract capital from other Gulf states, particularly Kuwait, where confidence in shares suffered with the \$95 billion (\$67 billion) crash of its unofficial stock market in 1982.
Although Bahrain has grown into a leading financial centre, with 170 local and international banks crowded into a sea-front area, its stock market has remained severely underdeveloped, bankers say.
At present the market is partly in the hands of 17 licensed brokers: local businessmen operating by telephone mainly from the souk, or market area, of the old town.
But most trading in the 34 Bahraini companies is carried out by investors directly, and often fails to be registered.
The new legislation will require all transactions to be conducted through brokers licensed by the exchange.
Mr Behzad said that in the medium-term the exchange would try to foster bigger brokerage firms with stronger capital backing. This would enable them to conduct larger share transactions.
The start will be modest, Mr Behzad said. But later, the stock exchange board will consider listing other companies based in other Gulf states.
In a third stage, probably further away, the market intends to invite multi-national firms to seek listings.

Thatcher's man helps in sell-offs

The Government's privatization programme has resulted in growing advisory business overseas.
NIM Rothschild has been made adviser to the Turkish government for the privatization of the pulp and paper industry, and to the Jamaican government for the privatization of the island's largest bank, the National Commercial Bank.
The team handling the contracts is headed by a director, Mr John Radwood, formerly head of Mrs Thatcher's policy unit.
The flotation of Jamaica's National Commercial Bank involves expanding the island's stock market before the shares can be sold. Wider share ownership is an important aspect of state asset sales, and will appeal to the governments embarking on privatization.
Rothschild's contracts show privatization is gaining popularity in the developing countries.

Company backing for charities rises to £193m

Company support for charities was worth about £193 million last year, including cash donations of £100 million, according to estimates published yesterday.
IBM UK Holdings, the most generous donor, was one of eight companies which gave £1 million or more.
Cash donations appear to have increased slightly and there has been a move by several larger companies towards genuine donations policies.
The 100th contributor, Rascal Electronics, donated £117,000 and only 35 companies gave £30,000 or more.
John Laing is commended for a fund-raising drive which raised more than £600,000 for the NSPCC.
A Guide to Company Giving, edited by Michael Norton, published by the Directory of Social Change (£12.50).

Table titled 'COMPANY DONATIONS' showing Amount (£ million) and percentage given by the top 10 donors in 1984/85. Includes IBM UK Holdings Ltd, British Petroleum Co plc, Barclays plc, etc.

BES company to raise £1.7m for hotel project

Country Resort Hotels, a Business Expansion Scheme company, is raising up to £1.7 million to acquire, develop and relaunch a hotel at Hickstead, West Sussex. Sponsored by John Fry, the mini-financial services group, Contry Resort is the first hotel-based BES company to be launched this year.
The BES gives investors tax relief on investments of up to £40,000 a year in certain types of unquoted company. Substantial amendments to the scheme in this year's Finance Act, were thought to have eliminated the asset-backed BES companies - such as hotel and pub-based ventures - which had come to dominate the scheme.
Country Resort Hotels will, however, have to combine its development project with substantial bank borrowings. The minimum subscription for the scheme is £850,000. At this level the costs of the issue will come to 13.5 per cent of the funds raised, while if the maximum £1.7 million is raised the costs amount to 9.8 per cent.
Country Resort Hotels is linked with two previous hotel-based BES issues - Resort Hotels which raised £1.9 million in 1984 and Coastal Resort Hotels which raised £852,000 last year. Resort Hotels will be managing the hotel which Country Resort Hotels is intending to acquire.
Mr Charles Fry, chairman of Johnson Fry, said yesterday that he expected "a USM flotation for Country Resort Hotels within five years."

Why Opec refuses to force the pace to help West out of a spot

While the 13 Opec nations struggle in Geneva to find a new output quota system to drive oil prices back upwards the oil consumers are left to dip nervously in and out of the spot markets to maintain their supplies.
The industrialized world's view of Opec's apparent indecision is that it typifies an organization which has lost not only control of the world oil market but control of its own membership.
The Opec view is that its indecision is a sign that it is taking the issues before it more seriously than ever before. It also feels it needs to emerge from the Geneva meeting with a new quota system which will be fair to all its members, which can be easily enforced and which will allow just enough oil to come on to the market each month to meet demand and gradually move the price upwards.
However, can such an organization realistically achieve such aims? Two of its members, Iran and Iraq, have been involved in a long and bloody war and even as the delegates from the two countries sit opposite each other at the Geneva conference table news of strike and counter-strike emerges from Tehran and Baghdad.
Some of its member countries are among the poorest in the world while others are undoubtedly the richest, which makes it difficult to believe that they share the same economic goals and have the same revenue needs from their oil fields.
It is such diverse factors which make it difficult for the Opec president, Mr Rilwani Lukman, the Nigerian oil minister, to force the pace towards the early announcement that the oil and stock markets are awaiting.
While he is among the most able of the 13 oil ministers in Opec, his elevation to the presidency after only months as his country's oil minister is in itself a manifestation of the internal problems the cartel faces. He is one of only three ministers - the other two are Dr Subroto, the Indonesian; and Dr Arturo Grisanti from Venezuela - who are politically acceptable to both Iran and Iraq.
The argument over the criteria which should be used to work out how new quotas should be distributed also indicates the differing attitudes among each delegation. The basis for the new system is that each country should be allocated a fixed percentage of an overall output ceiling set regularly by Opec to reflect demand.
Although seeming a simple solution it would be a significant breakthrough. It would mean that ministers could take a day rather than weeks to give the oil market the news it needs to base its pricing decisions.
However, how the percentages should be calculated is proving a seemingly impossible task. Libya, for instance, suggested that among the factors considered should be population in relation to land area - a suggestion which would mean a considerably larger share of the overall ceiling for itself.
Kuwait, in an attempt to get the discussions back on to a more serious footing, highlighted the trivialization of the discussions by countering that its percentage should be linked to the number of air conditioning units it has, or if that was not acceptable the number of air tickets Kuwaitis bought each year to escape from the summer heat.
For a brief period some of the delegations thought that the Kuwait oil minister was being serious, but his suggestions served their purpose and talks are now centred around such issues as levels of reserves, historical production and the technical ability to produce oil.
As one delegate put it: "We are now trying to marry the science of economics with the art of politics."
That Opec is, in this time, serious in finding a firm solution rather than its traditional fudge and compromise, was put forcefully by its president, Mr Lukman. He is due in London in just over a week and if he is to have any success in winning support or even sympathy for the Opec position from Britain's Energy Secretary, Mr Peter Walker, he will have to arrive as the head of an organization which has shown it can act positively.
He said in Geneva that he still hopes that Britain will follow Norway's lead and co-operate with production cuts to ease the oversupply situation.
"Even more important than any psychological impact Norway's action has had, is the fact that an industrialized country has thought it wise, proper and justified to regulate the supply of oil on the market."
"This is very significant, coming as it did at a time when other industrialized countries who produce oil are spreading ideology orientated concepts of the so-called free market being the best tool to achieve equilibrium in the supply and demand in the world oil."
History tells us that even in a free market economy like the United States government intervention was once necessary to regulate oil supplies in a way which matched them to demand.
It is also a well known historical fact that when the world oil trade was dominated by the major international oil companies, prior to Opec's price takeover, the formation of the price structure and stability in the market were achieved through regulatory planning of the amount of oil supply entering international trade."
Mr Lukman is still confident that the Opec system which will emerge from Geneva will be hailed as a significant step forward.
He said: "It should be reiterated that oil market stability is no longer our sole responsibility. This must be clearly understood."
In the type of situation which we have recently experienced in the oil industry there are no winners or losers. Experience has shown that today's winners could well be tomorrow's losers. It is in our best interest to break the vicious circle through dialogue and co-operation among Opec producers, non-Opec producers and consumers."
Whether Mr Lukman's hopes of a new agreement will be fulfilled today remains to be seen, but other delegates feel that the time has come to take a firm decision. One of the Venezuelans said: "If we are here in Geneva any longer the Swiss will ask us to apply for resident's permits."

COMPANY NEWS and APPOINTMENTS sections listing various business transactions and board changes.

Clydesdale Bank PLC advertisement featuring the 'BASE RATE' and announcing a change in lending rates from 10% to 11% per annum.

TSB OR NO TSB YOU'LL GAIN WITH L&Y advertisement for Lloyds Bank, offering a special commission and listing various bank services.

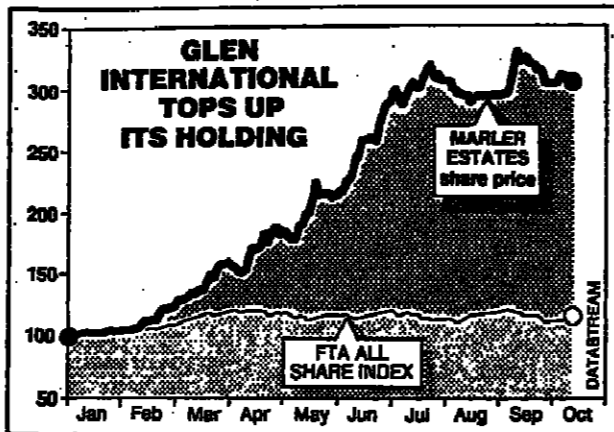
Vertical text on the right edge of the page: 'men', 'arge', 'British', 'ard line'.

STOCK MARKET REPORT

Pilkington Brothers may be target of £1.2 billion RTZ acquisition

By Michael Clark and Carol Leonard

Rio Tinto-Zinc, the mining finance company, is believed to have been buying shares in Pilkington Brothers, the glass manufacturer, and may launch a full bid soon.



Metals North which holds just 10 shares. RTZ refuses to talk. "We never comment on market rumours and we can make no comment on any shareholding we might have," said a spokesman.

RTZ shares fell 27p to 682p yesterday, with the market tumbling and as Australian speculators, who bought stock last week on the back of leaks about the CRA deal, sold their holdings.

had hitherto been the hot favourite target, is being ruled out by sector experts at Laing & Cruckshank, the broker, as being too expensive.

Pearl is capitalized at £530 million and would set a predator back by as much as £700 million. London and Manchester on the other hand is valued in the market at a more affordable £210 million, Refe at £180 million and Britannic at £155 million.

"The TSB is sitting on £680 million and has another tranche of £680 million coming in next year, but we think it is unlikely that it would commit almost half their pot of gold to just one life company," says Mr David Threadgold, a top insurance analyst at Laing & Cruckshank.

Corton Beach, the over-the-counter stock being shaped up for an introduction to the USM next spring by Mr Mike Keen, its ambitious chairman, firming a couple of pence to 48p yesterday. Its offer for Tern, the fully-quoted shirt maker, went unconditional last week and Corton now speaks for more than 90 per cent.

Oil shares in early dip

New York (Reuters) - Wall Street shares were mixed in early trading yesterday as oil shares, under pressure from possible difficulties with the production agreement of the Organisation of Petroleum Exporting Countries, moved lower.

Table with multiple columns showing stock prices for various companies like ASA, Allied Signal, Amoco, etc., and a section for CANADIAN PRICES.

Lloyds Bank Base Rate. Lloyds Bank Plc has increased its Base Rate from 10 per cent to 11 per cent p.a. with effect from Tuesday, 14 October 1986.

Table of RECENT ISSUES listing various stocks like Stanley Lature, TSB Group, Thames TV, etc.

National Westminster Bank PLC. NatWest announces that with effect from Wednesday, 15th October, 1986, its Base Rate is increased from 10.00% to 11.00% per annum.

Coutts & Co. Coutts & Co. announce that their Base Rate is increased from 10.00% to 11.00% per annum with effect from the 15th October, 1986 until further notice.

Table of EQUITIES and RIGHTS ISSUES listing various stocks and their prices.

Standard Chartered Bank Base Rate. On and after 14th October, 1986 Standard Chartered Bank's Base Rate for lending is being increased from 10.00% to 11.00%.

Hill Samuel Base Rate. With effect from the close of business on 15th October, 1986, Hill Samuel's Base Rate for lending will be increased from 10% to 11% per annum.

LONDON FINANCIAL FUTURES

Table showing LONDON FINANCIAL FUTURES with columns for Date, Open, High, Low, Close, and Est Vol.

TRADITIONAL OPTIONS

Table showing TRADITIONAL OPTIONS with columns for First Dealings, Last Dealings, Last Declaration, and For Settlement.

MONEY MARKET AND GOLD

Table showing MONEY MARKET AND GOLD with columns for Series, Dec, Jan, Apr, Jun, Aug, and Oct.

EURO MONEY DEPOSITS %

Table showing EURO MONEY DEPOSITS % with columns for Dollar, Deutschmark, French Franc, etc.

GOLD

Table showing GOLD with columns for Date, Open, High, Low, Close, and Est Vol.

FOREIGN EXCHANGES

Table showing FOREIGN EXCHANGES with columns for Market rates, Market rates, and Market rates.

OTHER STERLING RATES

Table showing OTHER STERLING RATES with columns for Argentina, Australia, Brazil, Canada, etc.

DOLLAR SPOT RATES

Table showing DOLLAR SPOT RATES with columns for Argentina, Australia, Brazil, Canada, etc.

LONDON TRADED OPTIONS

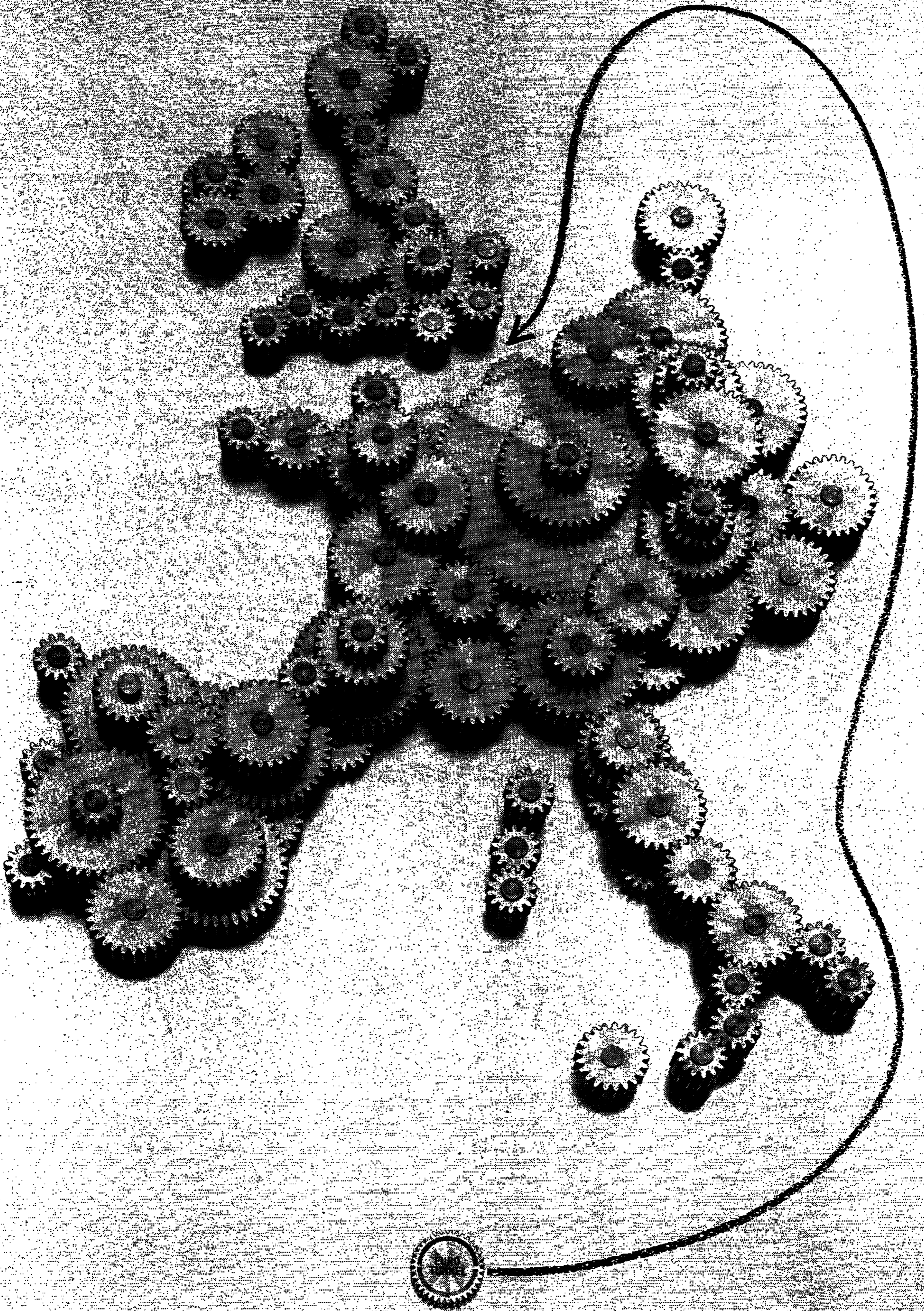
Table showing LONDON TRADED OPTIONS with columns for Series, Dec, Jan, Apr, Jun, Aug, and Oct.

*Not ordinarily available to individuals who are UK residents. 440 Strand, London, WC2R 0QS

Hill Samuel & Co. Limited 100 Wood Street, London EC2P 2AJ. Telephone: 01-628 8011.

October 14, 1986. Total contracts 28964. Calls 20251. Puts 8703. *Underlying security price.

ISSUED BY MORGAN GRENFELL & CO LIMITED AND ROBERT FLEMING & CO LIMITED ON BEHALF OF EUROTUNNEL plc AND EUROTUNNEL SA SUBJECT TO PARLIAMETARY APPROVAL



The missing link.

The Channel Tunnel is to be funded by private enterprise and will provide a vital link in Europe's communications in the 21st Century. Roll on 1993.

THE TIMES UNIT TRUST INFORMATION SERVICE

Main table containing unit trust information with columns for Name, Offer, Change, and Yield. Includes sub-sections for various trust categories like Equity, Income, and Bond.

UNLISTED SECURITIES

Table of unlisted securities with columns for High, Low, Company, Price, Change, and Yield.

INVESTMENT TRUSTS

Table of investment trusts with columns for Name, Offer, Change, and Yield. Includes sub-sections for various trust categories.

FINANCIAL TRUSTS

Table of financial trusts with columns for Name, Offer, Change, and Yield.

COMMODITIES

Table of commodities with columns for Name, Offer, Change, and Yield.

Portfolio Gold

From your portfolio card check your... From your portfolio card check your...

Table with columns for No., Company, Group, and % Change. Lists various stocks and their performance.

Please be sure to take account of any interim signs... Weekly Dividend... Please make a note of your daily totals...

Table with columns for Week, Div, and Total. Shows weekly dividend data.

Table with columns for No., Company, and Price. Lists British funds.

Table with columns for No., Company, and Price. Lists shorts (under five years).

Table with columns for No., Company, and Price. Lists five to fifteen years.

Table with columns for No., Company, and Price. Lists over fifteen years.

Table with columns for No., Company, and Price. Lists undated.

Table with columns for No., Company, and Price. Lists index-linked.

Table with columns for No., Company, and Price. Lists banks discount HP.

STOCK EXCHANGE PRICES Base-rate retreat

ACCOUNT DAYS: Dealings began Monday, Dealings end October 24, Settlement day October 27, Settlement day November 3. Forward bargains are permitted on two previous business days.

BREWERIES table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

BUILDINGS AND ROADS table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

FINANCE AND LAND table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

FOODS table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

CHEMICALS, PLASTICS table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

CINEMAS AND TV table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

DRAPERY AND STORES table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

ELECTRICALS table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Portfolio Gold DAILY DIVIDEND £8,000 Claims required for +52 points Claimants should ring 0254-53272.

OVERSEAS TRADERS table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

PAPER, PRINTING, ADVERT table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

PROPERTY table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

MINING table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

SHIPPING table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

SHOES AND LEATHER table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

TEXTILES table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

TOBACCOS table with columns for No., High, Low, Company, Price, Change, % Change, and P/E.

Ex dividend Ex all dividend Ex interim dividend Ex price at suspension of dividend...

UNIVERSITY OF LONDON/1

FOCUS

A touch of class from the Clyde to the Seine

At a time of major change, London University, with its 50 colleges, celebrates its 150th anniversary

London University is vast. All its 50 colleges and institutions cannot even be found on the capital's A-Z street guide. It needs a map of the Home Counties to encompass them geographically.

They can be found near Windsor in the west and Stepney in the east, from beyond Porters Bar in the north to Ashford in the south. Even that map does not suffice for there are institutions on the Clyde and on the banks of the Seine.

With 40,000 internal and 24,000 external students, it is the largest university in the country.

It is renowned not only for its scholarship and pursuit of academic excellence in the humanities and the social sciences, in medicine and law, science and technology, but also in its research work.

Its disciplines and resources range from the esoteric, such as astrophysics, to the practical problem, pioneered by the Royal Veterinary College, of using carbon fibre to replace tendons in racehorses.

Medicine, the physical and biological sciences, mathematics and computing, engineering, together with other subjects of direct vocational relevance, constitute about 75 per cent of the university's subjects for full-time students.

In financial terms, 82 per cent of its departmental expenditure is for medical, scientific and vocational work, but claims on the overall budget are not to be judged as yardsticks of importance.

The university lays much store on its pursuit of academic excellence in the smaller humanities departments, carrying out teach-

ing and research of great importance and making "a contribution to national life out of proportion to their costs".

It is celebrating its 150th anniversary at a time of dramatic change and challenge brought about by the demands of society and the imposition of economic constraints not contemplated a decade ago.

The university is a federation of decentralized autonomous colleges, schools and institutions, best described in a naval metaphor conjured up by its vice-chancellor, Lord Flowers, a nuclear physicist who has sat on royal commissions and a leading academician.

"The head of each college and school is the captain of his ship and I suppose I am the Admiral of the Fleet," he said of his role which is different from that of most vice-chancellors. He has no powers of hire or fire of senior academic staff; that is for the boards of governors of each college and school.

But that does not mean he is just a figurehead. As vice-chancellor he sees himself as the local chairman of the University Grants Committee distributing, with his

Developing the individual strengths of the institutions

colleagues in the University Court, the annual funds handed down in a lump sum to the university and, through the senate, maintaining and improving academic standards.

Since 1981, the university has been going through a vigorous restructuring programme to take account of radically changed funding. Like most other universities, London has suffered something like a 30 per cent cut in real terms during the past decade.

It has meant a two-fold process of rationalization: the transfer of many of the small departments and concomitant changes within institutions, and amalgamations of some of the mini-faculty schools.

Lord Flowers said that the university is building on the achievements of the process of rationalization by developing the individual strengths of the institutions which make up his "fleet". The objective has been that they should complement, rather than duplicate, each other in their teaching and research, both in what is done and how it is done.

The federation, with its manifold disciplines of teaching and research, can now be refined broadly into four categories.

First, there are the multi-faculty colleges such as University College, King's, Queen Mary in the Mile End Road (the "University of the East End"), and Royal Holloway and Bedford New College, the result of an amalgamation last year and based at Egham in Surrey.

Most of these operate in a wide variety of undergraduate and post-graduate studies, but others, such as the London School of Economics and Political Science and the Imperial College of Science and Technology, concentrate on their own specialized disciplines.

Second, there are specialized colleges such as the School of Oriental and African Studies, the School of Pharmacy, the Institute of Archaeology and the Institute of Education, which is Britain's largest graduate school for teachers.

Third, there are the medical and dental schools. London University trains one in every three doctors and an even higher proportion of dentists. Some of the medical schools are integral parts of multi-faculty colleges, others are individual chartered institutions.

Guy's and St Thomas's hospital medical schools, together with the Royal Dental School, merged to become the United Medical and Dental Schools or, as it is known internally among the academics, "Southwark United".

Fourth, there are the senate institutes such as the Warburg Institute, concerned with the history of the classical tradition, the Institute of Advanced Legal Studies and the Courtauld Institute of Art.

But London University also has



The vice-chancellor of the University of London, Lord Flowers, left, with the portrait of the first vice-chancellor, Sir John William Lubbock. Top, the Senate House in Bloomsbury and, above, Royal Holloway and Bedford New College. Top right, Gordon Square, Bloomsbury, and the Middlesex Hospital

the capacity and resources, built up over the years, to make an extraordinarily wide provision for continuing education, whether it is through its External System, the Department of Extra-mural Studies or Birkbeck College, a unique institution in the history of adult education, providing teaching in the evenings for those in full-time employment.

Or, as another example, through Goldsmiths' College which receives its grants direct from the Department of Education and Science for courses in the arts, education, music and science, but may well, if current talks succeed, become an integral part of the university.

London University, with its long history of being at the forefront of continuing education, has just appointed Professor Dorothy Wedderburn as pro-vice-chancellor to study how best its resources can be used to provide, in the words of Lord Flowers, "a whole package in the way of objectives and funding".

Continuing education has always had its own special problem over funding because, as Professor Brian Groombridge, director of the extra-mural department which provides more than 750 courses a year, puts it, there is the "sinister syllogism that if it is 'continuing' then the financial resources will be there. It is not like that at all".

But the demand for continuing education is intensifying to meet the requirements of a more complex technological society, said Lord Flowers.

"People in industry and commerce need constant updating — and by that I don't mean giving an employer a short time off so that the equivalent of a micro-chip can be inserted in him — in order that they can keep pace with the changes developing around them and consequently be able to make a greater contribution."

He mentions, as an illustration, the rapid development of fibre-optic technology which will transform communications in less than a decade. It is something on which

the university is rolling forward frontiers with the development of Livenet, an audio-visual system which will link five colleges and allow inter-active communication across London and joint participation in seminars, courses and tutorials.

Its potential for the develop-

A long history of being at the forefront

ment, if not the transformation, of education is inestimable.

Throughout the university there is a deep consciousness of its national responsibilities. This is inevitable when it provides 12 per cent of British full-time undergraduates and 20 per cent of postgraduate places.

There is also a high proportion of research work in most fields, together with specialized services, including national computing

facilities at its computer centre. The research programmes at the university constitute a significant proportion of Britain's total research work. It carries out 28 per cent of UK research funded by grants and contracts.

In some areas the university's contribution is extremely high: in clinical medicine as much as 53 per cent of university research; in engineering 22 per cent; and in computer sciences another 22 per cent.

Although federal in its structure, the university encourages interdisciplinary, not simply inter-collegiate, co-operation with specialists in most fields, being available to form joint research teams within the framework of the university.

Groups of scientists in micro-electronics are involving specialists in electronic engineering, physics, chemistry, mathematics and linguistics. Biotechnology requires the skills of biologists.

Continued on next page

While studying prehistoric Greece, Dr. Cherry discovered the computer.

Dr. John Cherry lectures in classical archaeology and the pre-history of Greece at the University of Cambridge. And until he started using an Apple personal computer, this was a truly Herculean labour.

Since standard typewriters and word-processing systems aren't able to produce the icons and letters of either modern or ancient Greece, twice as much work was required. As Dr. Cherry explains, "I had to write all the Greek parts of my notes, business letters and research papers by hand. Then a secretary using a typewriter specially equipped with a golfball of Greek characters would transcribe them."

A crucial tool for teaching. His Apple Macintosh has now made that ancient history using ordinary word-processing software with added Greek fonts. Dr. Cherry can now type directly onto his screen in any one of five ancient and modern Greek fonts, including Mycenaean Linear B script. The Macintosh can then enhance or modify any portion of the text into a wide variety of styles and point sizes.

Roman characters can be mixed in, if necessary. And when hard copies are needed, they can be instantly printed out, with faithful reproduction. Dr. Cherry says this system allows him "to do word-processing that would otherwise be impossible."

More than a word-processor. Utilising the great wealth of commercially-available software, Dr. Cherry's Macintosh can be put to many other tasks. For example, he is currently running a major

field project in Greece, together with colleagues from universities in the USA and Greece.

This involves collecting large amounts of data from various archaeological sites, and recording it in notebooks. The information is later loaded onto a computer at the University of Illinois, then transferred by satellite link to a Macintosh at the University of Cambridge.

A typical entry would describe a particular find together with the date it was recovered, the time of day, the soil conditions, and so on. Dr. Cherry can then analyse these entries at his leisure and transform them into graphical displays.

Dr. Cherry makes quite extensive use of graphics in his archaeological work. "I sometimes use my Macintosh in conjunction with a digitizing pad, on which I can trace map drawings for transfer to the computer." These drawings can then be completed by adding text or other illustrations.

Still more ambitious. But his Macintosh's greatest task is yet to come. Dr. Cherry has been commissioned to prepare quite an exhaustive catalogue of the many archaeological sites in Crete. When it's been finished, this will probably number some 1,000 pages, produced entirely on his computer.

The text and illustrations will be

composed with the help of advanced page-design software. Then they will be printed out on the Apple LaserWriter™ as camera-ready artwork.

This method will not only save the costly typesetter's charges, but will enable Dr. Cherry to make corrections instantly, and at minimal cost.

As Dr. Cherry says of his computer: "It's indispensable to my work now I'd be quite lost without it." But obviously, the uses of Apple computers and their myriad software needn't be confined to the Faculty of Classics.

More can be discovered about these uses by attending the AppleWorld exhibition at the Business Design Centre in London from October 29 to November 1. For further information, please post the coupon.

Form with fields for Name, Position, Institution, Address, Postcode, Tel. No., and checkboxes for requesting information and attending the exhibition.

Apple logo and slogan: Wheels for the mind.

Advertisement for the University of London 150th Anniversary featuring a grid of contractors and a central 'Congratulations' message.

Trust Alice to help out with the scientists

Science and industry have an ambivalent relationship in Britain. Industry wants academia's ideas and its products but, by and large, is slow to adopt them.

There are no end of stories about American companies leaving their British competitors standing, prevaricating, while they rush in with money and contracts to capitalize on new ideas.

The British, say the critics, are mostly unwilling to become involved until a project has reached at least prototype stage and preferably well beyond.

Scientists can be standoffish when industry does come on to the campus. The money it brings is welcome, but there is a fear that if industry becomes too involved in a particular project the universities may find their science and technology programmes being driven by the short-term needs of industry.

But both sides are learning. The Science for Industry Exhibition, which forms part of London University's 150th anniversary, tries to show how the two are co-operating to develop major new products, services and techniques.

The relationships vary — sometimes industry will have funded the research, sometimes it will be the customer or potential customer.

The exhibition, at Imperial College in South Kensington, contains some remarkable work.

● **Alice.** Not a lady but an acronym, behind which lies a remarkable device that could give Britain a major advantage in the race for the so-called fifth generation computers — "intelligent" machines that will be able to process knowledge and information rather than just crunch numbers.

The letters stand for *Applicative Language Idealized Computing Engine* and the machine, developed by Imperial College's Dr John Darlington, embodies a new way of thinking about computers.

Until now computers have worked sequentially, the instructions in the program being carried out one at a time. That is alright as far as it goes, but there are physical limits to how fast a computer

can operate and we are near the limits with our present machines.

So, bearing in mind that the power of a computer is in part a function of its speed, where do we go now?

Dr Darlington and his team realized that if the problem could be divided between a series of processors operating in parallel then the speed limitation would go.

The trick with Alice is that any one of a bank of processors can dip into a "pool" of work, take out a small packet of work, then, when that part of the work has been done, return it to the pool.

● **X-ray microscopy.** The microscopes most of us use are based on visible light. One step up from that, and used for sophisticated scientific work, is the electron microscope which sends a beam of electrons rather than a beam of light through the specimens being examined.

Electron microscopes are remarkable, but they have their limitations. Beams of electrons are scattered easily, for example, by watery environments. So they are not much use for examining such things as living cells.

To overcome such problems, scientists have been

Astonishment at the spin-off from their work

developing X-ray microscopes. Because of the relatively high penetration of soft X-rays through living material, it should be possible using the X-ray microscope to look directly at phenomena like dividing cells and cell replication.

Two basic elements are needed for the X-ray microscope. First, a source of high intensity soft X-rays of high brightness. Last month, scientists from King's College collaborated with researchers at the Science and Engineering Research Council's Daresbury laboratory, Warrington, to key an X-ray microscope into the only source in Britain capable of providing that.

This is the synchrotron, a type of particle accelerator that is still rare. The other essential element

is a means of focussing the X-rays. You focus light with glass lenses. But a glass lens has two problems for soft X-rays.

First, the X-rays have insufficient penetration to get through. Second, even if they did get through, the bending properties of the lens would be insufficient for the X-rays to be focussed.

So a different principle has to be used and it is in this that the King's team has been particularly successful. They have devised a means of building a focussing element using evaporated gold which uses the principle of diffraction to focus the X-ray beam.

This new type of microscope will fill the gap between the optical and the electrical microscope.

The light microscope can be used to examine living material, but its sensitivity to specimen detail is relatively poor. The electron microscope can look much more closely at such detail but the specimens used are in a vacuum and therefore dead.

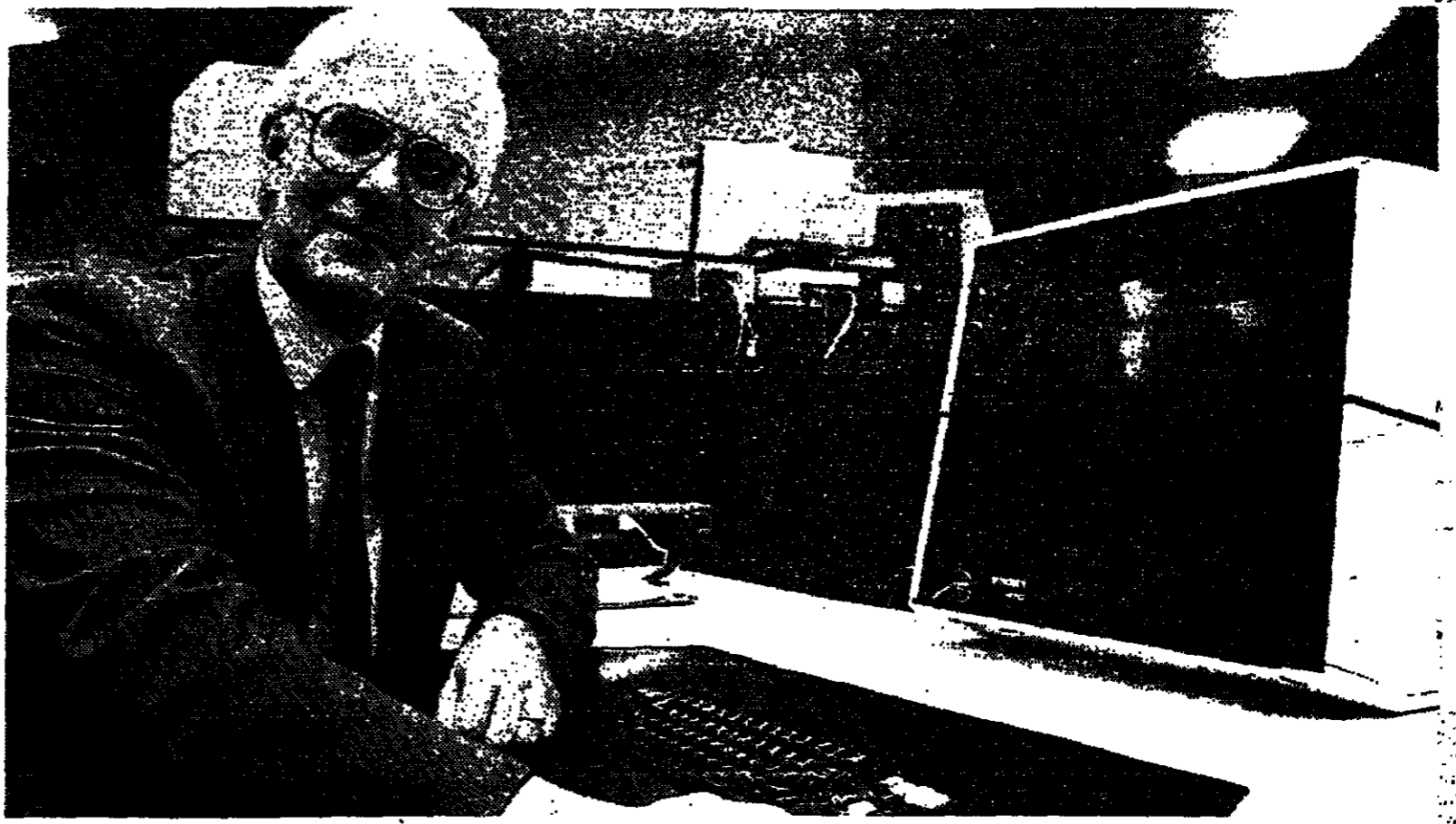
The X-ray microscope will provide a good intermediate possibility — an opportunity to look at living materials with a resolution which is 10 times better than that given by the best optical microscope.

It is expected to be an invaluable tool in cell and molecular biology and to be taken up rapidly in materials science and polymer science.

● **Artificial bones.** What do you do if bones need to be replaced? Normally the solution is to use metal — like the stainless steel in artificial hip joints. But the bone in our bodies is constantly renewing itself in response to the forces we apply in everyday life, when we walk, for instance.

Introducing a metal implant reduces the force felt by the bones beside it and in time bone will disappear from the body. This leads to a loosening of the implant.

To try to overcome this problem scientists at Queen Mary College have devised a composite material made of polyethylene and hydroxyapatite (one of the constituents of natural bone) which is much closer in its properties to that of the natural tissue.



Hi-tech support: Dr Richard Field, the director of the Computer Centre

A touch of class

Continued from previous page

chemical engineers, physicists and others. The Faculty of Medicine, embracing medicine, dentistry, veterinary studies and pharmacy, is an unrivalled centre of excellence for both basic and applied research. It constitutes the most important research base in Britain and has few rivals internationally.

Now the schools and institutes within the faculty are collaborating in 400 projects.

The whole is unified through the central machinery of court and senate, councils and boards. These are the bodies which bring together teachers and students, college heads and graduates from every part of the federation and serve as its democratic "government".

It is through this machinery that the university's unmatched talents are used to the best advantage of learning in educational, cultural and industrial life, nationally and internationally.

Malcolm Brown

Michael Hatfield

Chipping in on hi-tech

When microcomputer systems were introduced some years ago to provide a general service in universities, the demise of the huge mainframe computer was predicted. The prediction has proved very wrong.

Since it was first set up in 1968, the work of the London University Computer Centre has continued to grow. Its capacity became so saturated with work that a new Cray computer has been installed, and its Amdahl is being replaced by another model of the same make which is six times more powerful.

Dr Richard Field, the centre's director, said the department is handling one million jobs a year, the longest perhaps lasting an hour.

Although the Cray is the more specialized system, it is used in a variety of disciplines from all over Britain. The Amdahl, with its extensive range of software, is used primarily in the university.

More than 40 London University sites are connected to the centre by a variety of terminal arrangements. It is also linked to most other major university computer centres and to the Rutherford Appleton Laboratories via National Packet Switched Data Networks.

The centre, which has a staff of 140, was established to provide a service for education and research. Although it is used by most universities in Britain, the major portion of its resources is allocated to 13 universities in the south of England as well as the schools and institutions of London University.

High-quality graphical output can be obtained on 16mm and 35mm film in both monochrome and colour using a Dicomed

system which is especially suited to the generation of accurate diagrams, colour slides and animated film sequences.

Large print files can be produced on microfiche and a Kurzweil intelligent-input system is available for translating printed material into computer-processable form.

The centre provides technical and software support services. They include a program advisory service for users, a variety of courses on the ULCC services, and the support of a wide variety of compilers, applications and graphics software.

Dr Field said there is increasing pressure on the centre to provide more services of every kind. While further hardware resources can be bought and installed, it is the demand for more advice, packages, further courses and improved network facilities that are sometimes difficult to provide.

Such services require manpower and the possibility of enlarging amplification within the fixed number complement of staff is minimal, he said. It is a problem which has been exacerbated by the increasingly clear evidence of the shortfall in university salaries, compared with those in the computing industry.

Recruiting staff has been a problem, particularly in key areas such as telecommunications, IBM operating systems and compiler support, but Dr Field is confident the centre will be able to meet the growing demands on its resources.

MH

We'll be helping the University stay in touch for another century and a half.

London University now boasts nearly 3,000 BBC Micro's and 32 bit workstations.

A far cry from the quill pens and carrier pigeons used to communicate in 1836.

There's no doubt we've made up for lost time.

Econet local area networks are allowing college departments and whole universities to exchange information and data.


Many of our joint projects have had practical applications.

Wye College in Kent, has been using Acorn computers to examine strategies for land use in response to agricultural over

production and we have been working closely with Barts Hospital to develop computer-aided learning systems for medical students and nurses.

Most exciting of all, London, with the help of Acorn Econet X25 Gateway (a collaborative venture with QMC), is now in touch with other centres of learning around the world via the National Joint Academic and Research Network (JANET) and other X25 networks in the UK, Europe and America.

If the past five years have seen developments such as these, the next 150 will be rewarding indeed.

Acorn 
The choice of experience.

INSTITUTE OF EDUCATION UNIVERSITY OF LONDON

The Institute is a leading centre for research and advanced studies in education. Its international reputation attracts students and scholars from all parts of the world.

Research and teaching

The quality, range and innovative character of the Institute's research are recognized as outstanding and are reflected in the grants it receives from a variety of funding bodies. The Institute's range of courses in educational studies includes:

- initial teacher education for graduates
- in-service courses for teachers, with a variety of advanced diplomas, the BEd degree for serving teachers, short and special courses
- Master's degrees: MA, MSc, MEd
- Research degrees: MPhil, PhD
- international summer school

Further information:
Information Officer,
Institute of Education,
University of London,
25 Bedford Way,
London WC1E 6AL
(telephone 01-456 1500)

Conference and Arts Centre facilities

The Institute's location in central London makes it a popular venue for conferences and other events. Its facilities include:

- the University of London Logan Hall (capacity 933)
- other halls and well-equipped meeting rooms
- catering
- space for arts and other exhibitions
- hall of residence for vacation conference accommodation

UNIVERSITY OF LONDON/3

FOCUS



Academic roll-call: Sir James Lighthill, Provost of University College London; Professor Dorothy Wedderburn, Pro vice-chancellor and Principal of Royal Holloway and Bedford New College; Professor Ian Butterworth, Principal of Queen Mary College; Dr David Thomas, Director of Industrial Liaison, Imperial College; and Professor Stewart Sutherland, Principal of King's College London

Industrial links pulled in £100m

London University is not an ivory tower of long-hair academics, as one senior administrator put it, but an institution which has to live hand-in-glove with industry and commerce.

This is not only for the essential monetary benefits it brings, but for the cross-fertilization of skills and resources it provides.

In hard cash terms, the university's funding through research grants, contracts and commercial enterprises, falls far short of £100 million. It can range from astrophysics to planting a plate in a racehorse's leg.

Its schools and institutes have manifold links with industry and commerce. The latest annual figure for research council grants and contracts was £33 million, and from industry and commerce, local authorities and other services £40 million.

But there is also the work undertaken by the medical schools, for example, the School of Oriental and Asian Studies, and the London School of Economics.

Some of the colleges and schools have been involved in imaginative and long-term enterprises with outside companies.

Imperial College, for instance, has been closely involved with ICL and Plessey in the development of an advanced fifth-generation computer, the prototype now housed in the college building across the road from the British Science Museum.

The colleges and institu-

tions dealing with medical sciences have established, over many years, collaborative ventures with research councils, companies and organizations leading to grants covering medicine, dentistry, veterinary studies and pharmacy.

In the biological sciences, a university-wide profile of biotechnology research has been created which is expected to lead to increased collaboration in this area.

Imperial College and the London School of Hygiene

Exploiting the market potential

and Tropical Medicine are co-operating with the University of Nijmegen, the Netherlands, in the investigation of transmission block vaccines for the malarial parasite, plasmodium—a project funded by the Medical Research Council, the World Health Organization, the Wellcome Trust and the Hoffman La Roche company.

In the physical sciences, the university provides high-cost specialist facilities. Nuclear magnetic resonance equipment based at Queen Mary and the nuclear reactor managed by Imperial at Silwood Park are used by many other science and medical departments.

There is a major project to develop remote-sensing and digital-mapping techniques. Work between King's and the Royal Holloway and Bedford

New College on the preparation of electrically-active organic materials, funded by a CASE award and Ifford, has led to developments which are now protected by two separate patents.

At the university's Centre for Marine Technology, a study is being made into the dynamic responses of flexible offshore structures used in the oil industry, a project funded by the Science and Engineering Research Council, the Department of Trade and Industry, and industry.

A project aimed at improving speech synthesis technology is being undertaken by Imperial, University College, Leeds University, and GEC and Plessey.

The Middlesex Hospital Medical School has an ongoing collaborative arrangement with the Wellcome Foundation and is working on the Aids virus.

Teachers of geography at the London School of Economics, King's and University College are participating in a joint research programme in applied geomorphology, an innovative review of landslide hazard in Britain, for the Department of the Environment.

Macro-economic modelling in an international context is being undertaken by staff from the London Business School, Birkbeck College and Queen Mary with funding from the Treasury and the Science and Engineering Research Council.

With financial constraints

on the academic world, London University, like many other similar institutions, is taking its resources out into the marketplace, and exploiting its potential.

The university has even created a Development Advisory Group, with one team specifically studying greater industrial collaboration and technological transfer.

At Imperial there is an industrial liaison officer, David Thomas. Clients include major industrial companies in Britain, the United States and Europe, international corporations and agencies and national governments.

University College has its academic services unit, searching for and receiving

ideas in applied research and development. One such project, a computer-controlled wave-stabilizer for vessels, has tremendous applications potential, not only for shipping and boats but offshore oil rigs.

Queen Mary College has created in the past decade Industrial Research Ltd, a college offshoot which markets the products of the college's research, spawning new companies and manufacturing its products.

There is an instrument company, making millimetre wave, infra-red detectors for laboratories involved in fusion research and astrophysics. Products are sold in Britain, Japan and the US.

University College has its academic services unit, searching for and receiving



Royal Postgraduate Medical School at Hammersmith Hospital

RPMS is the only multi-disciplinary postgraduate medical school in the United Kingdom. It is a leading centre for medical research and education and is one of only two university medical institutions rated by the University Grants Committee as outstanding across the whole field of its research activities.

Less than half of the School's finances now come from Government sources, our research in particular depends on alternative funding. Founded in the austere years of the 1930s RPMS has little endowment: donations and legacies will enable us to maintain the scale and quality of our research.

In just over 50 years, amongst many other achievements it was:

- The birthplace of open heart surgery,
- The home of the first linear accelerator used in the treatment of cancer,
- The first in Britain to use the artificial kidney and a pioneer in kidney transplantation,
- A leading centre of development in the care and treatment of premature babies.

Our Jubilee Appeal concentrates on the support of our continuing RESEARCH in these four areas of heart disease, cancer, transplantation (particularly kidney and bone-marrow) and the care of the new-born child, and on support of our TEACHING role.

WE NEED FINANCIAL HELP TO MAINTAIN OUR RECORD OF SUCCESS

For further information please contact John Williams at our Jubilee Appeal Office, RPMS, Du Cane Road, London W12 0HS Tel: 01-740 3245 or send donations to the same address.

Charity exempt from registration.

UNIVERSITY COLLEGE LONDON-REPORT 1986

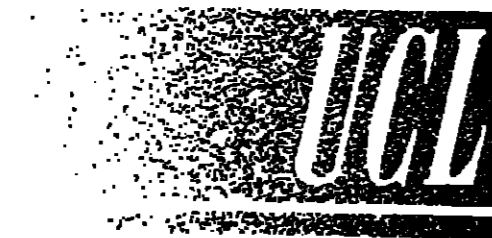
Discovery of a major Egyptian Tomb.
Satellite experiments on Halley's Comet.
Rapid progress in creating a new joint Medical School.
Front Quadrangle completed after 159 years.
Overseas students from more than 100 countries.

This college has done extremely well during the year. A few of its many achievements are shown above.

One of its key advantages is in the number of those in professional practice who contribute to the teaching.

The capital city also has the best of the country's facilities in terms of libraries and other resources.

UCL has built a reputation and structure that gives it almost the status of a university within London University.



UNIVERSITY COLLEGE LONDON Gower Street London WC1E 6BT

amdahl

Computing for
Britain's Universities
Congratulations to the
University of London
on its 150th Anniversary

Amdahl has long been associated with the UK academic environment with major installations at Durham, Edinburgh, Leeds, London, Manchester, Newcastle and Reading.

The Amdahl Corporation is one of the world's leading suppliers of quality data processing products to the large systems market place. Amdahl (U.K.) Limited was formed in 1977 and markets and supports a range of products including large-scale computer systems, vector processors, storage products, communications systems, software, consultancy and educational services.

AMDAHL (U.K.) LIMITED
VIKING HOUSE
29-31 LAMPTON ROAD
HOUNSLOW MIDDLESEX TW3 1JD
TELEPHONE 01-572 7383

WE'VE GOT IT WRAPPED

Samuelson Video Equipment Sales Ltd is proud to supply close circuit television systems and hardware to the University of London and its associated establishments. Our product range also includes the latest interactive video system, Talk 5, now in use in over 20 major organizations and educational institutions.

SAMUELSON VIDEO EQUIPMENT SALES LTD

202-212 Cridwell Road, London NW2. Tel: 01-459 1313

We've been offered a place at quite a few colleges . . .

Our Group has considerable worldwide experience in handling the specialist insurance requirements of universities and colleges, and we are delighted to act as insurance brokers to many of the principal colleges at the University of London and other colleges throughout the United Kingdom.

Worldwide we operate from over 300 offices in 75 countries and in the UK and Eire our 28 offices are located in every major city, meeting the insurance and risk management needs of businesses as well as many educational bodies.

For our specialist University service contact:

Mike Ellis
Alexander Stenhouse UK Ltd
Norman Insurance House
Kings Road
Reading RG1 4LW
Tel: 0734 61100



International Insurance Brokers

امداهل

FOCUS

UNIVERSITY OF LONDON/4

Flexible studies on the outside

When the university's external system announced the results of this year's law examination it encompassed nearly 4,000 students from 52 countries across 20 time zones, from places as far apart as Moscow and the Cayman Islands.

Such is the scope of the external law degree examination that it is by far the largest in the world. But it is not just in law that the external system, which is as old as the university, provides London University degrees. The disciplines vary from economics and management to art and languages, from divinity and education to agriculture and music.

It has been agreed to introduce areas covering health studies, mathematics and computer sciences. A further area of study, in engineering, is being considered for the 1990s. There are 24,000 external students, mostly undergraduates, divided equally between domestic and overseas, the latter world-wide but with particular concentrations in West Africa and the Far East.

The most important characteristic of the external system is the flexibility it gives to the students, freeing them from the constraints of a regular "paced" pattern of study undertaken in a particular location at a certain age. Undergraduate external students are offered guidance during their studies, including subject guides, related papers on their syllabuses, informal tutorial assessment, and short courses offered by the university or by the extra-mural departments of other universities.

Reaching out to students is an ever-unfolding process with the external system soon to embark on a set of new ventures. One of them will be the opportunity for external students to receive lectures on taped cassettes.

As part of its programme to extend links with the external academic world, industry and commerce, the university is in



People at the top: Professor Brian Groombridge, director of the extra-mural department, and Jane Cannon, president of the University of London Union

contact with, so far, 70 polytechnics and further education colleges about the possibility of providing teaching courses of study.

Sam Crooks, secretary for external services, said the aim was to create a nation-wide network of colleges which would co-operate with the university's committee for external students in providing continuing education.

"In essence the model would be that London would provide 'core' training ma-

terial for use throughout the country, in partnership with participating colleges who would provide local tutorial support designed for small firms in their area," he said.

The university is already one of the major national providers of continuing education, with 35,000 individuals benefiting from university teaching as part-time, extra-mural and continuing education students.

The extra-mural department, which provides more than 750 courses in co-operation with local education authorities and public institutions, and in association with education and cultural groups, sees itself as one of the prime links between the university and the community. Professor Groombridge, the department's director for 10 years, said: "It is a simple truth worth uttering that nearly all the department's students are Londoners."

"The rest of the university recruits students from all over the world, certainly from all our courses is that they combine liberality of style and content with vocational relevance."

The department not only co-operates with other education bodies, but there are also growing ties with the external system. Mr Crooks said: "The extra-mural department is designing an access course which is intended both to offer an alternative to A level as a route of entry into the external system, and also to enhance learning skills and to prepare students for subsequent study in the external mode."

"It is possible that this course, leading to an extra-mural certificate of the University of London, could also be offered nationally - once more through a network of colleges."

Professor Groombridge said that the extent to which extra-mural students characteristically work at university level is not always appreciated. The diplomas and certificates to which many extra-mural courses lead are designed, validated and examined by the university. Much of the non-award bearing work, he said, is of a similar quality.

MH

Students join the fight for survival

Today's students are an altogether more serious bunch than their predecessors, according to conventional wisdom. They are preoccupied with career prospects and are rather short on joie de vivre.

But this is not the view of Jane Cannon, this year's president of the University of London Union, the Malet Street "club", to which all 45,000 students belong.

"I would say they're more realistic than they were a few years back. Perhaps they've realized they can't change the world," she said. And they are not simply after degrees so that they can get jobs.

"I think the university is still seen as a way to educate yourself for life as well as work," said Miss Cannon.

"This is why we are so worried about the supposed shift from arts to science; the fact that, speaking as an engineer, people seem to be putting all the resources towards engineering at the expense of the other subjects

which they no longer seem to see as useful.

"If not the opinion of the university, which hopefully it never will become, it is the opinion of government and outsiders that it's only the science and engineering courses that have any worth at all, so they're the only ones that deserve to be protected."

One of the beauties of the university, she believes, is that there are a lot of small colleges and departments which are in many cases world specialists in their studies.

"If the cutbacks continue there's a danger that some of these small institutes will go to the wall, and they're virtually irreplaceable."

On this subject, far from the students and the university establishment being at loggerheads, there has been a considerable unanimity.

"It's been all of us fighting together to save our university," said Miss Cannon. "It's got that serious."

MB

Chart University Tutors

LLB BACHELOR OF LAWS UNIVERSITY OF LONDON (EXTERNAL)

The College has an excellent reputation and has been a major success to the high standards of the quality of our study materials.

Our courses include:

- a thorough grounding in each law of England and Wales
• detailed methods and cases
• practice in examination technique
• a full range of library and computer resources
• personal attention of lecturers
• excellent examination coaching

If you require further details of the full time, part time, correspondence, intensive modular courses, study materials and courses, contact the Chart University Tutors, please contact: Nick Brown, LLB LL.M. Barrister, Chart University Tutors Ltd, 53 Gower Street, London EC1V 0DD. Tel: 01 251 4911 (24 hour answering service)



BIRKBECK COLLEGE University of London

EVENING DEGREE COURSES

Birkbeck is a unique institution: the University of London college which offers all its courses in the evening for people who are working during the day. Subjects offered include Modern Languages, Philosophy, Psychology, Economics, Criminology, Computer Science, Geography, History and Mathematics, and many others are also available. Applications are considered from January of each year, and interviews are normally held in May-June.

Further details: Assistant Registrar, Birkbeck College, Malet Street, London WC1E 7HX. Tel: 01-631 6390.

Wolsey Hall Oxford

DOUBLE FIRST

As the first university to offer external degrees, London dramatically extended the opportunities open to those who could not attend a university.

As the first college to provide home-study courses for London's external degrees, Wolsey Hall, Oxford gave those same students the help necessary to realise their new opportunities.

Since then over 7,000 Wolsey Hall students have passed University of London BA, BSc, BD, and LLB exams.

Wolsey Hall is proud to have played a part in making an imaginative innovation a success.

Today Wolsey Hall courses still offer the surest way of gaining an external degree; so why not telephone or write for a free prospectus now!

The Hon. Frank Fisher CBE, MC, MA, Dept. AL7, Wolsey Hall, Oxford OX2 6PR. Telephone (0865) 52200 (24 hrs.)

N M Rothschild & Sons Limited

Merchants and Bankers

CONGRATULATIONS ON THE 150th ANNIVERSARY OF THE UNIVERSITY OF LONDON AND BEST WISHES FOR THE FUTURE

NEW COURT, St. SWITHIN'S LANE, LONDON EC4P 4DU

HATS OFF TO A PROFITABLE PARTNERSHIP



Both education and industry are vital to Britain's future. And they're interlinked - education fostering and developing people's talents, and industry using those talents in manufacturing and services. It's a profitable partnership for all of us.

At British Gas we have a long-standing commitment to this process. In the field of higher education, for instance, we fund scholarships, encourage our research scientists to take up visiting professorships and even maintain an industrial chair at one university.

In schools, too, we provide a comprehensive resource materials service backed by a local field force of around 250 regional advisers. Their work brings them into schools, where they are able to build bridges between subject specialists and the gas industry's engineers and scientists.

The relationship between British Gas and the community isn't just a commercial one. It depends on mutual goodwill and understanding. That's why we are so committed to promoting greater awareness of the importance of science, technology and industry, from an early age.

We put a lot of energy into building and maintaining these partnerships with the communities we serve. But then, energy is our business.

British Gas ENERGY IS OUR BUSINESS

Tracking down the killer diseases

London University is a medical powerhouse probably without parallel anywhere in the world. One in every five of the 40,000 or so students is studying medicine and London accounts for half of all UK postgraduates in medicine and dentistry.

The medical students and post-graduate researchers are spread among an enormous clutch of hospitals, institutes and laboratories whose facilities range from the first-rate to the Dickensian.

The life blood of the profession is research. Some, like cancer research or the investigation of Aids, is very high profile, the media having an insatiable appetite for stories about them.

Most goes on quietly without fanfare. Yet in almost every school or institute intriguing medical detective work is being done.

● The scavengers. In his play *The Doctor's Dilemma*, George Bernard Shaw puts into the mouth of one of his characters, Sir Ralph Bloomfield Bonnington, a phrase which has found its way into almost every dictionary of literary quotations: "Stimulate the phagocytes."

"There is at bottom," says Shaw's physician, "only one genuinely scientific treatment for all diseases and that is to stimulate the phagocytes. Drugs are a delusion."

Shaw was, as usual, overplaying his hand, but the quotation did reflect what was then a current pre-occupation at St Mary's Hospital, where an acquaintance of Shaw, Sir Almroth Wright, was a pioneer in the land as Professor of Bacteriology.

He had begun to realize the importance of certain substances in the blood in helping the immune system to scavenge bacteria, a process known by the technical name phagocytosis.

Nearly 80 years on, Shaw's words are coming to life again at St Mary's where researchers are using some of Wright's ideas to develop a new approach to the treatment of serious infections.

The researchers have been looking at the breakdown of the scavenging mechanism in severe surgical infections, such as peritonitis, and trying to find ways to reverse that failure.

One promising method being investigated is the use of an antibody called Core Glycolipid.

The St Mary's team has

shown that this antibody appears to reverse the depression of the immune system and improve removal of bacteria from the bloodstream.

Their hypothesis, for which evidence seems to be growing, is that Core Glycolipid is acting as what Almroth Wright called an opsonin, something in the blood serum that makes the invading bacteria more attractive to the scavenging system.

Antibiotics destroy or inhibit the growth of bacteria. This alternative route is to take a depressed immune system and put some fight back into it.

The antibody sticks to the bacteria and indicates that it is ready to be picked up by the immune system.

It is as though the bacteria and the antibody together were shouting to the immune system: "Here we are, come and get us" — in short, stimulating the phagocytes.

● The scourge. Alzheimers disease, or senile dementia, can devastate the elderly. Memory goes, there is a progressive degeneration of personality and intelligence seems to deteriorate.

Experts reckon there are at least 750,000 sufferers in Britain and that the numbers will grow rapidly.

Researchers at the Institute of Neurology, led by Dr David Bowen, reader in Neurochemistry, have made major discoveries about the role of defects in the brain's chemical messengers in the disease.

The team has concentrated particularly on a compound called acetylcholine, a chemical substance secreted at the end of nerve fibres which helps to transmit nervous impulses.

They have shown that patients with Alzheimers have less of this substance in their brain than normal persons.

For example, if content of acetylcholine is plotted against memory loss in individual patients there is an inverse relationship — so the less acetylcholine in the cerebral cortex, the greater the memory loss.

The work at the institute has attracted world-wide attention and earlier this year

The university is a medical powerhouse. Malcolm Brown examines its intriguing research

the Swedish drugs company Astra, which has a particular interest in senile dementia, put up £1.35 million to help to establish a neuroscience research centre which will operate alongside the Institute's Department of Neurochemistry.

● The killer. Many millions of pounds and countless man-hours have been devoted to trying to contain malaria, but it remains the most serious human parasitic disease known.

About 200 million people suffer from chronic infection and every year the same number acquire malaria.

A million people, mostly the very young, die of it every year in Africa alone. Experts say that almost half the world's population is at risk.

Researchers at the London School of Hygiene and Tropical

New drugs to beat malarial infection

cal Medicine, are tackling the problem from three angles.

One group is developing simple technological barriers, such as mosquito nets impregnated with lethal doses of insecticides. A second approach is to break the cycle of malarial infection.

The mosquito infects man, then another mosquito taking a blood meal from the infected man is itself infected and in turn passes on the disease.

Vaccines now being worked on, it is hoped, will help to break that cycle at the man-to-mosquito stage, so that the "second" mosquito in the cycle does not become infected.

Work on this so-called transmission-blocking vaccine is being done in collaboration with scientists at Imperial College and at Holland's Nijmegen University.

A third team is evaluating promising new antimalarials, drugs which are effective against malarial parasites. This is increasingly necessary because many mosquitoes are now resistant to many of the common drugs used in the fight against malaria, like Chloroquine.

Preparations, like the Chinese plant derivative Quinaghaosu, which are new to the West, are being examined.

A top of class rating for young engineers

Professor Eric Ash can tell you exactly what kind of rating London gets as a place to train engineers, or at least he can for the two institutions in the university with which he has been most intimately involved — University College, where he was Professor of Electronic and Electrical Engineering, and the Imperial College of Science and Technology, whose rector he has been for just a year.

When the University Grants Committee went round the universities earlier this year judging their research, University College and Imperial came away with high marks. All engineering departments, save one, in each college were rated "outstanding".

Professor Ash, one of the most distinguished engineers in Britain, thinks that applied science departments have to perform at two levels in a university.

First, they have to push back the frontiers of knowledge. Second, they have to demonstrate that the work they are doing is applicable and the only way you can demonstrate that, said the professor, is by getting it applied.

So the interplay between engineering departments and industry is crucial in assessing an institution's worth. On that measure also London does very well.

Imperial, for instance, has more Alvey contracts (contracts for the Government-backed information technology programme) than any other university in the country.

Imperial has become — and was even before Professor Ash took over — a byword for industrial collaboration.

It takes many forms: research funds, contract work, hardware. For example, IBM has given the college a computer system worth £2 million and Honda put up £700,000 for a state-of-the-art wind tunnel in the Department of

Aeronautics, the biggest award the Japanese company has made to an outside research organization.

Industrial money is much needed. Government funding cuts have hurt the universities. Professor Ash said one of the difficulties in talking about the financing of his college is that it is a cumulative problem.

"The gaps that we see are not this year's 4 per cent cut, which is what Imperial College has sustained. It's really the erosion of funding which has taken place over the last dozen years or so."

"We're competing with Stanford, MIT, Novosibirsk, you name it; and it is becoming increasingly difficult to sustain our cutting edge in the face of the opposition."

That problem of underfunding by government is paralleled by another — the way industry underpays engineers. Professor Ash thinks it may be difficult to raise engineers pay across the board, but then that is not really what needs to be done anyway.

Talent is not divided in an egalitarian way and industry should recognize that by paying the "stars" what they are worth.

He worries deeply about the way, the brightest and the best, undervalued in this country, are drifting towards America.

Few scientists or engineers go purely for the money, he said, so at university level he thinks his duty is clear if he is to stop the outflow.

"It's the combination of money and better facilities, that's the real core. So I regard it as my responsibility to do everything in my power to make sure the facilities we have here are world class. The moment we have to say that we've failed on that is the beginning of the end."



It is my responsibility to make sure our facilities are world-class. Professor Eric Ash

Professor Ash has probably got about seven years ahead of him as rector. Pressed on his ambitions he comes up with three. First, a doubling of the college's interaction with industry "without compromising on doing work at the highest possible academic level. I want interaction with industry on those themes where we are genuinely breaking new ground."

Second, he wants to build more bridges between the engineering department and other activities at Imperial.

Finally, he wants to double the number of women in the college. "We have about 18 per cent. By the time I leave I want to see no fewer than 36 per cent."

MB

FINIS CORONAT OPUS.

"THE END CROWNS THE WORK."

Congratulations to the University of London on the 150th anniversary of its foundation.

BDH

BDH Limited, manufacturers and suppliers of fine chemicals and laboratory reagents to the University of London and to scientists, researchers and educational establishments world-wide.

BDH. Essential Science

BDH Limited, Broom Road, Poole, Dorset BH12 4NN. Tel: (0202) 745520. Telex: 41186 and 418123 TETRA G.

THANKS!

To all London University members for your continuous custom over recent years whilst we have changed from a small computer shop to a multi-million pound company.

Whether using or creating high technology products we wish you continued success in these exciting times.

We feel honoured to be one of your official suppliers:

Simnett's

Sales and service of computers and associated equipment

SIMNETT'S LIMITED
Unit 15, St. Georges Industrial Estate, Richmond Road, Kingston upon Thames, Surrey KT2 5BQ
Telephone: 01-541 1495

THE SCHOOL OF PHARMACY UNIVERSITY OF LONDON

This leading UK School of Pharmacy offers undergraduate courses leading to Honours degrees in PHARMACY (B.Pharm) and in TOXICOLOGY with PHARMACOLOGY (B.Sc).

Excellent research opportunities exist in Pharmaceutical Chemistry and Biochemistry, Pharmacology, Toxicology, Pharmacokinetics, Pharmaceutical Microbiology, Pharmaceutical Engineering Science, and Pharmacognosy leading to the M Phil and PhD degrees of the University of London.

Full details from The Registrar, R.P. Gould, Appeal Director, The School of Pharmacy, 29-39 Brunswick Square, London WC1N 1AX

The Middlesex Hospital and Medical School Research Fund Appeal

Patron: The Duke of Northumberland, KG, GCVO, TD, PC, FRSthe Lord Cobbold, KG, GCVO, PC, DL

In 1835, nearly 100 years after the foundation of The Middlesex Hospital as a small building in Windmill Street, The Middlesex Hospital Medical School was founded. 1985 marked the 150th Anniversary of this foundation and the School can look back with pride on its record over a period during which some 7,500 students have qualified at the School and gone into practice in this and many other countries of the world.

The School sees this as an opportunity to commemorate its past and to take a major step towards the future by establishing The Middlesex Hospital and Medical School General Charitable Trust.

Research at the Medical School and Hospital already covers a wide range of topics, but four major areas have been identified for which funding is sought, namely Heart and Blood Vessel Disease, Arthritis and Rheumatism, Hormonal Diseases and Cancer, and Primary Health Care.

To enable us to continue our work in these vital areas, we need your generous support which will help to ensure that The Middlesex continues to make the vital contribution to medical research as it has done in the first 150 years. With the creation in 1987 of the new University College, and Middlesex School of Medicine we expect this contribution to be even greater.

How You can Help

Our aims are ambitious; any programme whose purpose is to extend the frontiers of medical knowledge must necessarily be so. The Trust is seeking contributions from as many people and sources as possible.

A gift or contribution may be associated with a specific project, and the Appeal Director would be very glad to discuss and advise on the most suitable way of recording such generosity.

Whilst a contribution made under deed of covenant is also a highly beneficial way of giving (we can recover the tax from the Inland Revenue), all gifts are welcome and no amount would ever be considered too small.

Cheques should be made payable to the Trust.

If you would like any further information about the Appeal, please contact:

R.P. Gould, Appeal Director
The Middlesex Hospital and Medical School Research Appeal
Anor College, Charlotte Street
London W1P 1LD. Tel: (01) 636 8333 Ext 3407.

PEAT MARWICK

OFFER THEIR CONGRATULATIONS TO LONDON UNIVERSITY ON THEIR 150TH ANNIVERSARY

PEAT MARWICK

CELEBRATE YOUR NEXT OCCASION AT A LONDON CAMPUS VENUE.

FURTHER DETAILS FROM

Joyce M. McLeod, Goldsmiths' College, New Cross London SE14 6NW, 01-852 7171 ext. 2279

Mr. P. W. Page, Halls of Residence, Queen Mary College, 58-110 High Road, South Woodford London, 01-504 5282

Miss Jane Dawson, Conference and Personnel Officer, London Business School, Sunway Place Regent's Park London NW1 6SA, 01-262 5250

Mrs. J. F. Pugh, Westfield College, Kidderpore Avenue, Hemstead London NW2 7SA, 01-425 7141

Mrs. J. Parnell, King's Campus Vacation Bureau, King's College London, 825 King's Road, Chelsea London SW7 0DL, 01-351 6011

The Conferences Office, London School of Economic & Political Science, Houghton Street, London WC2A 2AE, 01-425 7595

S.A. Simpson, Royal Holloway & Bedford New College, Egham Hill, Egham Surrey TW20 0EX, 0784 35807

Miss Gillian Davies, Imperial College of Science & Technology, Conference Office, Shepherd Bushway, Exhibition Road, Hammersmith London SW7 2BZ, 01-589 5111

Margaret R. Smith, Recruitment Conference Agency, 15 Warren Square London WC1H 0NS, 01-436 8888 ext. 3408

Handwritten note at the bottom of the page.

UNIVERSITY OF LONDON/6

FOCUS



Legal action: Rosalyn Higgins, Professor of International Law at the LSE

Professor Versatility

London University's law schools sometimes seem like a kindergarten for media stars. Ian Kennedy, Professor of Medical Law and Ethics at King's College, perhaps took the process to its logical conclusion in 1980 when he became the BBC's Reith Lecturer, the pinnacle of public service broadcasting. Michael Zander, Professor of Law at the London School of Economics and legal correspondent of *The Guardian*, has made a second career out of explaining to the layman the intricacies (and sometimes the idiocies) of the law. More recently, a new face has begun to appear on our TV screens when, as increasingly seems to be the case, matters of great international moment are in the balance. Rosalyn Higgins, a colleague of Mr Zander at LSE where she is Professor of International Law, has been seen most recently talking about the American bombing of Libya (she thought it was hard to say that act was lawful under current international law) and the extradition to Belgium of the British soccer fans allegedly involved in the tragic Heysel stadium incidents. (She thought there were grounds for the extradition applications to be made lawfully.) Professor Higgins is a remarkable woman. "My full-

time work is at the university," she said, explaining that her work as a QC in the Middle Temple involves "early mornings, evenings and weekends". She has also managed to become almost a fixture at the BBC External Services where she is regularly called in for overseas broadcasts. The fact that the LSE, BBC's Bush House, the Law Courts and the Temple are all within the same square mile makes it a congenial life. But it is the university that is at the centre of it and Professor Higgins, a Cambridge graduate, thinks there is nowhere, not even Oxbridge, to touch it. Not the least of the attractions is that the sheer size of London University means there is an awful lot of law going on in it and, therefore, plenty of room for specialists to pursue their interests. "There is an enormous potential pool of graduate students which, in turn, allows for an enormous range of courses so you can do very specialist work. This is not minimalist teaching." There is a downside. The size of the university and the number of separate institu-

tions which may be involved in teaching a subject means that decision making at the federal university involves discussions with other colleges. "There are long lead times in all sorts of things we need to do," said Professor Higgins. "Putting on a new course might take two years." Another negative aspect is that, inevitably, exam procedures are cumbersome, particularly at graduate level. Each teacher of a particular subject is likely to construct his or her own course within the overall university regulations, so the same subject may be approached in a number of different, but each equally valid, ways. But to test that knowledge the university, through its teachers, must draw up a single university exam. That is not easy and the marking is extremely time consuming. "I do find that uncomfortably large parts of my year are spent in university marking," she said. But she wouldn't change it. "You're where the action is." Zipping in and out of the Law Courts, popping down to the Foreign Office to compare notes with their experts, dropping into the BBC. "Professionally I'm certainly where I want to be."

MB

Link up and learn

Within a year it will be possible for London University's five non-medical schools to share each other's courses, seminars, demonstrations and tutorials without the staff and students having to leave their buildings. The development is a remarkable interactive video and data network using fibre optics, computers and television screens. Television cameras will be controlled orally, not manually, and the person speaking will appear on screen. When Livecast comes into operation at London - initial experiments start next year - individuals and groups on two or more sites will be able to link up to produce distributed tutorials, seminars, lectures and conferences. Research teams on different sites working on related problems will be able to exchange views and information without the need to travel and meet. It will all be done by transmitting voices, pictures and data down a fibre-optic cable the thickness of a strand of hair. Because the system is fully interactive, speakers will be able to question and be questioned by their audiences. It will mean learning new techniques. Richard Beckwith, the project manager, said it will be difficult only in that it is unfamiliar and will be less demanding than, say, driving a car. The five colleges to be linked initially are Imperial, King's, Queen Mary, Royal Holloway and Bedford New College and University College, together with the computer centre and the audiovisual centre in the Senate House at Malet Street. In general, the most satisfactory system for group viewing and discussion of remote video is by projection television. But as well as the incoming picture selector and the network control computer, there may be other input devices such as a camera for slides. The new generation of cheap cameras are so sensitive that normal room lighting is more than sufficient.

MH



The Courtauld Institute of Art is moving to Somerset House

£3.2 million has been raised so far; £1.8 million more is needed to save the historic North Block, to rehouse this world famous Institute and reopen to the public The Fine Rooms as the new Courtauld Institute Galleries where it will be possible to display 85% of their Unique Collections instead of 33% as at present. Further details from: The Trust Office Courtauld Institute of Art Fund 20 Portman Square, London W1H 0BE Telephone 01-935 9292 We gratefully acknowledge the generous support of The Arthur Anderson & Co. Foundation in this project.

BEST WISHES

to the University of London on its 150th anniversary

SUN ALLIANCE INSURANCE GROUP INCORPORATING PHOENIX ASSURANCE 1 Bartholomew Lane London EC2N 2AB Telephone: 01-588 2345

THE WELLCOME TRUST 1936-1986

The Wellcome Trust congratulates the University of London on its 150th Anniversary.

The Trust's association with the University of London has been a happy one during the past fifty years through its provision of support for research in the biomedical sciences and the history of medicine in many of the constituent colleges and medical schools of the University.

The Trust looks forward to continuing these close links in the future.

1 PARK SQUARE WEST, LONDON NW1 4LJ

The University's book shop is now Europe's finest bookstore.



It's our birthday too, but we're only 50. To celebrate, we've modernised Dillons and enormously expanded our stock. So now our interests in the University are not just academic. 82 Gower St, Bloomsbury WC1. Tel: 01-636 1577

Brains for hire

The University of London is Britain's largest university, and one of the most research-oriented.

Industry, commerce and the public sector all use our research and consultancy services extensively. We earned £120 million last year from this work.

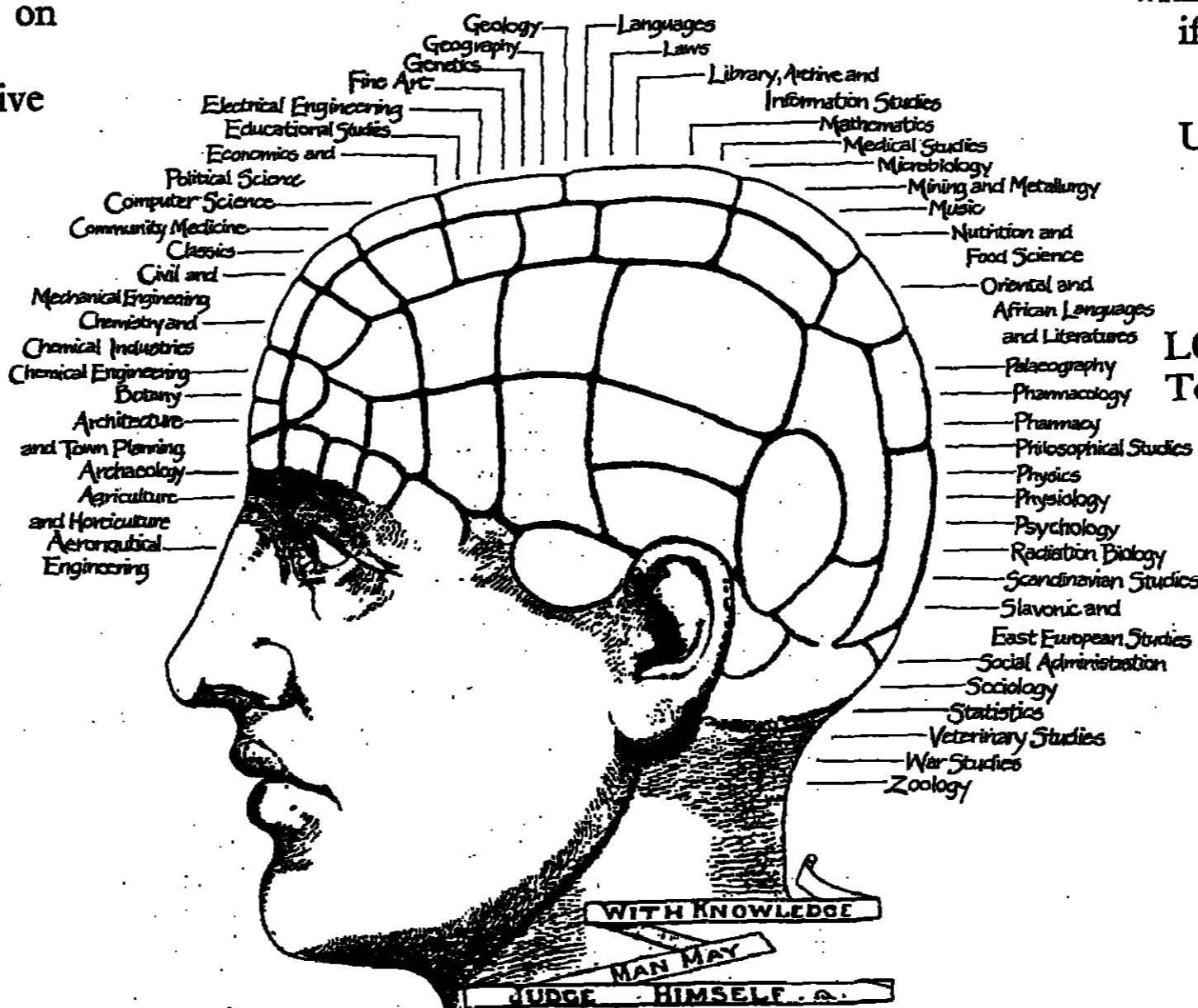
The range of services on offer is vast: from art conservation or intensive Arabic courses for businessmen and diplomats, to veterinary science; from the study of the earth's core to outer space.



Advanced research is being undertaken in every major branch of science, engineering and technology, medicine, dentistry and pharmacy. Our reputation in the arts, humanities and social sciences (especially law and economics) is no less outstanding.

If we're not already working with you, we'd like to see if we could. Contact us at the address below:

University Development Office, Room 106, Senate House, Malet Street, LONDON WC1E 7HU. Telephone: 01-636 8000 ext. 3220 or 3217



WITH KNOWLEDGE

MAN MAY

JUDGE HIMSELF

is rating engineers

OCCASION VENUE



PROPERTY BUYERS' GUIDE

OVERSEAS PROPERTIES

A very personal discovery...



Sixty-three acres of woodland and gardens... that's the Marina del Este.

A little over an hour's drive east of Malaga, the Marina, with 326 berths, is positioned with exquisite care around a sheltered bay...

For more information, please contact our London sales office at 150 Regent Street, W1R 5FA. Tel: 01-439 6288 or the Marina on 014 38 640 400 (7 days a week).

Marina del Este

OSBORNES Solicitors have instructions to sell the following properties:-

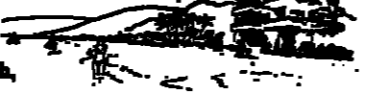
Table with 3 columns: Location, Property Description, Price. Includes entries for ITALY, TUSCANY; PORTUGAL, ALGARVE; SPAIN, MALAGA; SWITZERLAND, MONTREUX.

OSBORNES Solicitors

93 Parkway, London NW1 01-485 8811

ASETIB PROPERTIES Welcomes you to the Costa del Azahar.

We are an established Spanish registered estate agency with offices both in the U.K. and Spain. We specialise in what we consider to be the most idyllic area of Spain...



01-546 2766

EXHIBITION OF PROPERTIES ON THE COSTA BLANCA AND FLORIDA SUNDAY 19 OCTOBER 1986 12-3 p.m. THE HOLIDAY INN, 7 ALTYRE ROAD, CROYDON, SURREY

The INTERNATIONAL PROPERTY & TIMESHARING EXHIBITION at the Cumberland Hotel, Marble Arch, London W1

Form for requesting a brochure: Name, Address, Tel.

COSTA BLANCA & COSTA DEL SOL Buy direct & save money. Villas, bungalows, townhouses, apartments. We offer value for money in prime positions from £10,000 to £100,000.

APARTMENTS FROM £33,000 VILLAS FROM £60,000 A lifetime of luxury for a moment's good sense. THE RIGHT AREA... THE RIGHT CHOICE... LOCAL EXPERTISE... SPORTING FACILITIES... COMPLETE SECURITY... THE RIGHT PRICE...

A Project of Overseas Corporation An opportunity to buy a beach front villa... SONESTA BEACH VILLAGE PUERTO DE LA DUQUESA - COSTA DEL SOL

TENERIFE For the largest selection of Villas and Apartments on this beautiful island contact THE OVERSEAS PROPERTY CENTRE

A.C. Frost & Co COSTA BLANCA (Midway between Valencia & Alicante) The villa of your choice built on your own selected plot...

PROPERTY FROM £13,000 28 high quality developments, prime locations, Costa Blanca, Costa Brava, Costa del Sol & Tangieria.

FRANCE Approvals from £15,000 to £25,000... JLM 100 Kensington Rd, Tel: 0232 82145

SECURE UK BASE FOR SALE Superb apartment - ideal overseas home owner. 30 mins Gatwick, 1 hour Heathrow.

PUERTO BANUS/MARBELLA Incredible value! Luxuriously furnished 2 bedroom apartment...

CYPRUS A variety of architect designed villas for sale... FRANCE All regions, all budgets.

ANDORRA Buy direct from builder... BELLA ASSOCIATES The name for property in Algarve.

COUNTRY PROPERTIES

SURREY PURLEY £365,000 Royal detached residence on acre and garden...

SUSSEX NR BRIGHTON. Fully furnished modern detached house with 3 bedrooms...

YORKSHIRE INDIVIDUALLY DESIGNED 3 bedroom detached house with 2 bathrooms...

SURREY CHIDDINGFOLD. Lovely country residence set in 96 beautiful acres.

SUSSEX HENFIELD West Sussex. Two beautifully restored houses built on the site of a 17th century manor house...

YORKSHIRE NEW HOMES OXFORD, SURREY. New detached house, built for occupation. New concept for a 3 bedroom house...

SURREY WATERS ESTATE AGENCY. Ring Carole on 01-688 8275

WALES BURWASH WEALD. Family retirement or second home. 2 bedroom detached house with 2 bathrooms...

YORKSHIRE SOUTH OF ENGLAND RETIRE IN DIGNITY. To the glorious surroundings of a new English Country cottage or flat...

SURREY WILTSHIRE. LEATHERHEAD 5 MINS NISS. 1900s detached 7 room house on 1/2 acre...

WILTSHIRE WILTSHIRE. WEEKEND RETREAT. Charming 3 bedroom detached cottage with 2 bathrooms...

YORKSHIRE WILTSHIRE. WILTSHIRE. WILTSHIRE. WILTSHIRE. WILTSHIRE. WILTSHIRE.

PORTUGAL BELL ASSOCIATES. The name for property in Algarve. Choose your choice of land, farms or commercial, heavy investment and advice.

RENTALS DOCKLANDS PROPERTY CENTRE. HOUSES AND FLATS THROUGHOUT THE DOCKLANDS AREA. RESIDENTIAL LETTING DEPARTMENT. TEL: 01-01-790 9560

Home from Home. Have beautifully furnished or unfurnished top quality houses and flats for long or short term lettings.

PALACE PROPERTIES. We have a superb selection of personally inspected furnished and unfurnished properties in many fine Residential districts.

SPAIN Spanish Property MARRACON. The property here is sold with the highest quality of workmanship...

NO CONCRETE JUNGLES NEAR MOJACAR. COSTA ALMERIA/ALICIA. Villa & bungalow with pool & garden...

COSTA DEL SOL IMAGINE! If you know a company offering clients a superb selection of Apts, Villas, Bars & Commercial Properties...

PROPERTIES IN THE COSTA DEL SOL. Detached villa £20,000 to £100,000. 3 bed villa £25,000 to £35,000.

MARBELLA RESALE. Specialists for villas, apartments, townhouses, Beach, golf, pueblo, inland etc. Properties also for sale.

SWITZERLAND SWITZERLAND. Swiss Alps. Swiss Alps. Swiss Alps. Swiss Alps.

ANDORRA Buy direct from builder... BELLA ASSOCIATES. The name for property in Algarve.

PORTUGAL BELL ASSOCIATES. The name for property in Algarve. Choose your choice of land, farms or commercial, heavy investment and advice.

RENTALS DOCKLANDS PROPERTY CENTRE. HOUSES AND FLATS THROUGHOUT THE DOCKLANDS AREA. RESIDENTIAL LETTING DEPARTMENT. TEL: 01-01-790 9560

Home from Home. Have beautifully furnished or unfurnished top quality houses and flats for long or short term lettings.

PALACE PROPERTIES. We have a superb selection of personally inspected furnished and unfurnished properties in many fine Residential districts.

RENTALS DOCKLANDS PROPERTY CENTRE. HOUSES AND FLATS THROUGHOUT THE DOCKLANDS AREA. RESIDENTIAL LETTING DEPARTMENT. TEL: 01-01-790 9560

Home from Home. Have beautifully furnished or unfurnished top quality houses and flats for long or short term lettings.

PALACE PROPERTIES. We have a superb selection of personally inspected furnished and unfurnished properties in many fine Residential districts.

RENTALS

PEMBERTON & CLARK

12 FINCHLEY ROAD, ST JOHN'S WOOD, LONDON NW8 6EB TEL: 01-588 5999

Quraishi Constantine

LONDON'S LEADING RESIDENTIAL LETTING AGENTS offering that personal & professional service

LITTLE VENICE W5... BARBICAN EC2... CHELSEA SW10... HAMMERSMITH W6... FULHAM SW6... KENSINGTON W8... TO ALL LANDLORDS OWNERS

Hampton & Sons

FURNISHED RENTALS... EATON PLACE SW1... SCARSDALE PLACE W8... A SELECTION FROM OUR REGISTER... 6 Arlington Street, London SW1A 1RB 01-493 8222

ROBERT BRUCE

BRUNSWICK GARDENS, W8... BEMBOW ROAD, W6... CADOGAN STREET, SW3... ST JOHN'S WOOD, NW8... BIRCH & CO 01-734 7432

MARSH & PARSONS

LAMETON PLACE W11... BRUNSWICK GARDENS W8... SALVEISEN 01-837 6091/9622

ESTATE AGENTS

LETTING YOUR HOME? PLEASE FOR OUR HELPFUL DISCOUNT... Fulham 01-736 5503 Putney 01-789 5004

ORR-ERLING ASSOCIATES

POINT STREET SW1... ALBERT PLACE SW... ROSAM GARDENS SW7... MARKEVIN SMITH ASSOCIATES 01 721 7957/31 9801

AROUND TOWN

128 Finchley Park, W11... WIMBORNE SW15... SW1... SW1... SW1... 01-229 9966

LIPFRIEND

WIMBORNE SW15... SW1... SW1... SW1... 01-489 5534

INTERNATIONAL EXECUTIVES

WIMBORNE SW15... SW1... SW1... SW1... 01-489 5534

CONSERVATIVE MP

WIMBORNE SW15... SW1... SW1... SW1... 01-489 5534

PART TIME VACANCIES

£7,000... 5 1/2 hours per day... Tel: Janine Barton 01-408 1122

PERSONNEL ASSISTANT

Required mornings (extra hours required occasionally)... Tel: Janine Barton 01-408 1122

SECRETARY

Part time for 3 hours... Director and owner of group of companies... Tel: 01 594 2329

LA CREME DE LA CREME

ADMINISTRATOR MUSIC £12,000... SPONSORSHIP! £9,250... Handle Recruitment 10 New Bond St, London W1 01-493 1184

Handle Recruitment

10 New Bond St, London W1 01-493 1184... SERBO GROAT TRADE EXPORT EXECUTIVE... MAYFAIR ARCHITECTS

DAVIS CO SECRETARIAL

01-736 6652... Researcher £10,500... SECRETARY PERSONNEL £7,500 per ann.

STRUCTURE 2000

PAYSEC £13,000... PUBLISHING £8,500+... POLITICAL £8,500... FASHION £8,500... 01 409 0744

ADDD SECRETARY

£10,000 + OEE... £11,000 + BENEFITS... MILLER McNISH 01 409 0744

PROPERTY CO MAYFAIR

Requires top PA/Sec with shorthand and good organizing skills... Call Brian Dapper on 01-629 4171

SUPER SECRETARIES

OIL SECRETARY FROM £7,500... SHORTHAND/AUDIO SECRETARY... RECEPTIONIST PLUS £9000 neg.

LEGAL £29,500

Need opportunity to work for 2 years... Telephone Miss Westmacott on 01-402 3453

EXECUTIVE SECRETARY

PA £10,500 + Co. benefits... SECRETARY/PA required for Service Director of the British...

COLLEGE LEAVES

SECRETARY/PA required for Service Director of the British...

NON-SECRETARIAL

RECEPTIONIST/TELEPHONE... AFRICAN CHARTER... AFRICAN CHARTER

ATOR

A Friendly firm in Fulham needs a residential negotiator... Ring John Hollingsworth on 01-736 6406

SALES EXECUTIVE-PUBLISHING

We are looking for a salesperson who will create a systematic mailshot programme... You will serve the two companies in our Group both publishing news letters on raw materials.

ATOR

A Friendly firm in Fulham needs a residential negotiator... Ring John Hollingsworth on 01-736 6406

SALES EXECUTIVE-PUBLISHING

We are looking for a salesperson who will create a systematic mailshot programme... You will serve the two companies in our Group both publishing news letters on raw materials.

EXECUTIVE HOMES TO LET

IN PRIME LONDON LOCATIONS... Personal help in selecting from over 500 prestigious properties... 586 3088

JOHN D WOOD & CO

ESSEX - NR COLCHESTER TO LET... Colchester 4 miles, London 55 miles... 01-629 9080

MALVERN

ESSEX - NR COLCHESTER TO LET... Colchester 4 miles, London 55 miles... 01-589 8122

BELGRAVIA

TWO TANTALISING GARDEN FLATS... All recently fitted and furnished... 01-637 4782

MARBLE ARCH W1

Large luxury 1 double bedroom apartment... 01-637 4782

PRIORY MANAGEMENT OF KEW GREEN

Offers Selection from Current List... 01-940 4555

ESSEX

WANTON 2 young architectes... 01-483 9887

MAIDA VALE, W9

Brand new flat superbly equipped... 723 9612

ACCESS TO houses, flats, bedsits, shares

in all areas by calling Rental Guide 01-686 6552

WIMBORNE SW15

2 newly converted flats in top location... 01-489 5534

WIMBORNE SW15

2 newly converted flats in top location... 01-489 5534

WIMBORNE SW15

2 newly converted flats in top location... 01-489 5534

WIMBORNE SW15

2 newly converted flats in top location... 01-489 5534

WIMBORNE SW15

2 newly converted flats in top location... 01-489 5534

Law Report October 15 1986

Writ retains priority along with restored judgment

Bankers Trust Co v Galadari Before Lord Justice Kerr, Lord Justice Parker and Lord Justice Balcombe [Judgment given October 14] A creditor's successful appeal which restored the original judgment...

the goods was given by the first defendant's wife and in the ordinary course of the court...

did not suffer by reason of an erroneous decision of a lower court. Where a sheriff withdrew from possession pursuant to an erroneous order of the court...

Mr Timothy Charlton for the plaintiffs Mr Peter Irvin for the Chase Manhattan Bank Mr Thomas Shields for the Sheriff of Greater London.

LORD JUSTICE PARKER said that on July 7, 1986 their Lordships allowed the plaintiffs' appeal from a judgment of Mr Justice Webster...

On June 25 the first defendant's wife having maintained her claim to the goods intended to be seized, the sheriff issued an interpleader summons.

On May 19, before the issue of any such summons, the Chase Manhattan Bank obtained judgment against the first defendant in a sum exceeding US\$11 million...

When their Lordships restored the judgment of April 4 the plaintiffs notified the sheriff's office on July 8 of their decision and requested the sheriff to reissue possession orders...

There was authority which showed that the effect of the withdrawal of possession pursuant to an erroneous order must be dealt with as a matter of practice and not law...

Justifying sting of libel

Khashoggi v IPC Magazines Ltd and Another Before Sir John Donaldson, Master of the Rolls and Lord Justice Slade [Judgment given October 10] The rule that an injunction to restrain publication of a libel should be granted in a case where the defendant intended to rely on the defence of justification...

had caused the plaintiff to get in touch with the first defendant and explain that she objected. That had led to a letter written by the legal manager stating that they would not be publishing anything that they could not justify...

Mr Buckley said that the rule in Bonnard v Perryman applied in the simple or classic case of justification and that it had no extension to cases where the defendant intended to rely on the defence of justification...

On an application to Mr Justice Saville for an injunction it had been said by the defendants that it was too late because all copies had been distributed. On appeal, his Lordship, sitting with Lord Justice Croom-Johnson, had taken the view that that had been too simplistic...

Nothing his Lordship said should be taken to denigrate the duty of candour, but as a result of the letter from the defendants' legal manager, which prevented any proceedings until after publication, time was of the essence and it was unrealistic to contain a lack of candour in the circumstances.

The injunction should be discharged but in doing so it should be made clear that the court was not saying that the plaintiff had not been entitled to the injunction she had obtained up until that time.

Damages for pay-cut breach

Rigby v Ferodo Ltd Before Lord Justice May, Lord Justice Woolf and Sir Rouseley J. [Judgment given October 10] The action of an employee in either accepting or not accepting unilateral notice of wage reductions by his employer...

in Gunton v Richmond upon Thames London Borough Council (1981) 1 Ch 269 the contract underpinned the employee. He was accordingly entitled to damages.

The facts of this case had not been before the courts, save in Burdett-Coutts v Hertfordshire County Council (1984) 1 IRLR 911. There Mr Justice Kenneth Jones reached a conclusion similar to that of Mr Justice Ognall in this case.

LORD JUSTICE MAY said that the employee had been employed as a lather operator since 1964 by the employer at the defendant's premises. By 1982 the contract was determinable by the employer on 12 weeks' notice.

On September 18, 1982, as a result of financial difficulties the employer issued written notice to all their employees that their wages would be reduced by 10% from October 1, 1982.

Correction In R v Doncaster MBC, Ex parte Brain (The Times October 11, 1986) a misplaced comma in the seventeenth paragraph of our summary of Mr Justice Megaw's judgment changed the intended meaning.

The national game is paying the price of outdated thinking

Why football can no longer ignore the lore of diminishing returns

By Neil Harding League football is steadily losing supporters, prestige, and reputation. It is also losing money.

Does that really matter? Is football an industry, like food retailing or electronics, or is it a means of providing some fun, excitement, and relief from the pressures of life...

Twenty years ago such a question would have been irrelevant. England had just won the World Cup, football was still considered the most glorious of the nation's games...

A ritual part of Saturday life

(there are 92 clubs in the League). In any other business, if not all 92 outlets were doing well, there would be some talk of closing some of them down.

well. So much was this ritual part of Saturday life that many supporters went to their local stadium even on alternate Saturdays when the first team was playing away.

TENNIS: RECORD ENTRY FOR 1987 DAVIS CUP COMPETITION

Britain's hopes as thin as Mexico air

Britain will be away to Mexico, almost certainly on shale (clay), in the first round of next year's Davis Cup competition.

There is more bad news for Britain in that, should they fail to beat the odds in Mexico, their next assignment would probably be on the grass courts of Yugoslavia in October.

There has been a record entry of 72 nations for the 1987 competition. 16 in the "first division" (officially the world group) and the rest in the European, African, American and Eastern zone qualifying groups.

Hutchins is also aware that, in Mexico City this year, West Germany were beaten outdoors and the United States badly mauled indoors - and both visiting teams had ample cause to wonder what they had done or said, if anything, to offend the Mexican public.



Putting the decline into perspective

Our report looked at all 92 clubs in the Football League, comparing and ranking their activities on 26 measures of financial performance.

Table with 5 columns: Top ten, %, 1984-5, %, 1982-3, Bottom ten, %, 1984-5, %, 1982-3. Lists clubs like Q of Sts, Q of O's, Cardiff, etc.

The table lists performance by pre-tax profit margin - an approximate guide to the financial management of a season. The figure in brackets is the total of sales for the season - tickets, players, assets, etc.

Table with 5 columns: Top ten, %, 1984-5, %, 1982-3, Bottom ten, %, 1984-5, %, 1982-3. Lists clubs like Norwich, Middlesbrough, etc.

Wolverhampton and Swansea had not returned accounts for the 1984-5 year at the time of publication of the report.

of the supermarkets, continue to believe they can run a viable service only to find that most of the customers have deserted them.

SPEEDWAY

A Mauer force for the Danes

Ivan Mauer, six times world champion, is still a major force in the sport, and the eminence grise behind the Danish triumphant march to trophy after trophy by the Dane Hans Nielsen.



Slobodan Zivjovic: Triumph over Britain

TODAY'S FIXTURES

Football: RAF v Watford-Opel League 8 (RAF Udon) 7.30. Rugby Union: THORN EM COUNTY CHAMPIONSHIP: Thorn v Durham at Aspley, 7.30.

Nobody who has ever been to a football match can be unaware of this. With few exceptions, such as Sheffield Wednesday, football clubs are in declining inner-city areas.

This would not matter if the clubs recognized it and catered for it. But the clubs have changed little or nothing since the days when most of the supporters came from the surrounding streets and would not have dreamt of taking the car to football - in any case, most would not have had a car.

Even before Justice Poplewell suggested ground improvements in the wake of the 1985 Bradford fire, it was obvious that if football clubs were to become viable businesses, they should attend to their "upstairs, downstairs" attitude.

The problem has been, and still is, that not many football directors and chairmen see it that way. Many of them have invested money in their local club not because they saw it as a business from which they expected returns but as a way of making their mark in the local community and (b) fulfilling a log-felt ambition to own their local club.

The solution must lie in fewer clubs

soaked to the skin standing on the terraces supporting the club and dreaming of one day owning it. Investment in a football club is not like any other investment. The man who may make hard business decisions every day of his life becomes, once at the head of a football club, a fan who wants nothing more than to see his club win and is willing to spend money, and lots of it, to do so.

To convince such people that football must also be a business, if it is to survive as an entertainment, is difficult. For they know that if they run out of money, they will come another day with dreams and money to try to keep the whole thing going.

FOOTBALL

Kick-off 7.30 unless stated. European Championship: Group Four: England v Northern Ireland (7.45). Republic of Ireland v Scotland (8.30).

Other Sport: Basketball: Chrisberg League: First Division: Durham at Aspley, 7.30. Handball: Handball: Leicester Riders v Calderdale Explorers: 8.00. Soccer: Soccer: Luton v Leyton Orient (7.00). Plymouth v Exeter University (7.30).

TELEVISION AND RADIO

Edited by Peter Dear and Peter Davalle

Olympian dark horse is now running well

THE BID (BBC1, 9.35). The odds on Birmingham's staging the Olympic Games are currently 2 to 1 against...

CHOICE

The International Olympic Committee makes its decision in Switzerland on Friday, and this documentary follows the Birmingham effort...

ROCK SCORPION

Rock Scorpion (Radio 4, 3.00pm) is a neat little Afternoon Play by Sheila Hodgson...

Anne Campbell Dixon

Peter Davalle writes: Before forsaking all viewing and listening and settling down to a two-week holiday...



Claire Bloom as Emily Dickinson: The Belle of Amherst on ITV, at 10.33am

BBC1

- 6.00 Ceefax AM. News headlines, weather, and sport. 6.50 Breakfast Time with Debbie Greenwood and Guy Meehan...

BBC 2

- 9.00 Ceefax. 9.15 Daytime on Two: Muriel Gray visits a Perthshire farm. 10.00 For Four...

ITV LONDON

- 9.25 Thames news headlines. 9.30 For Schools: maths - the number 'five'...

CHANNEL 4

- 2.30 Film: Buck Private's (1941) starring Bud Abbott and Lou Costello...

VARIATIONS

- BBC1 WALES: 6.30pm-8.00 Wales Today. 6.57-7.00 News. 7.35-8.00 Queen in China...

Having a mother and stepfather who were never around meant Judy was left to look after her younger brothers and sisters.

Advertisement for NSPCC: Eight years old and Judy is already the mother to five children. A donation of £15.48 can protect a child for two weeks...

5.30am Adrian John 7.00 Mike Smith's Breakfast Show 8.30 Simon Bates (incl. 11.40 interview with Bob Geldof) 12.30 Newsbeat...

World Service: 6.00 Newsweek 7.00 News 7.20 Twenty-four Hours 7.30 Development 8.00 News 8.10 Reflections 8.15 Classical Record Review...

Advertisement for Count Basie: Count Basie: Radio 3, 12.30pm. 4.00 Choral Evensong from Hereford Cathedral...

Advertisement for On long wave: On long wave, (6) Stereo on VHF 5.25 Shipping, 6.00 News Briefing, 6.25 Prayer (s)...

FREQUENCIES: Radio 1: 1053kHz/225m; 1089kHz/275m; Radio 2: 693kHz/433m; 909kHz/330m; Radio 3: 1215kHz/247m...

